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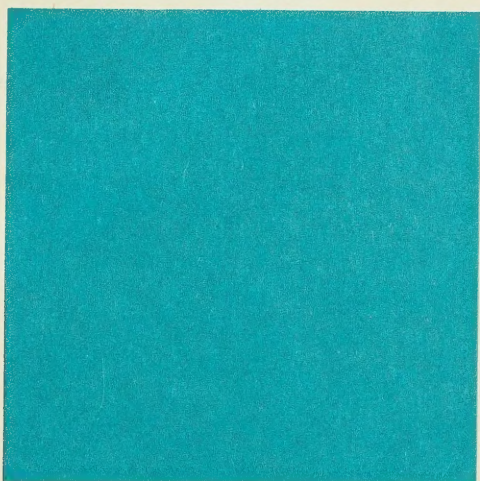
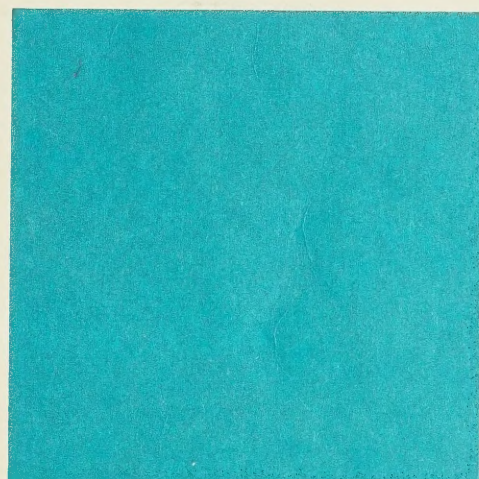
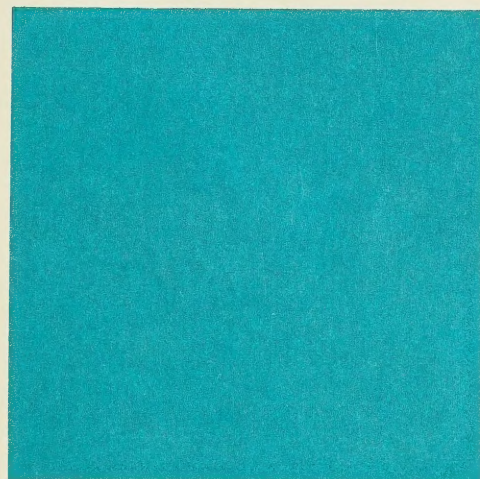
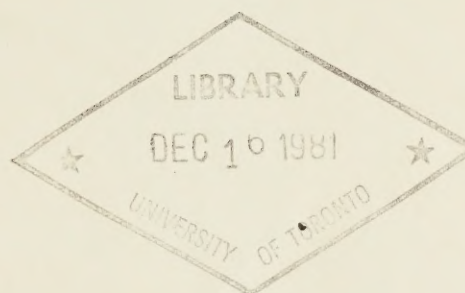


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The apparent nutritive value of food available for consumption in Canada, 1960-75

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THE APPARENT NUTRITIVE VALUE OF FOOD AVAILABLE FOR CONSUMPTION IN CANADA, 1960-75

Linda Robbins
Sushma Barewal

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Gaétan Lussier, Deputy Minister

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ABSTRACT

In this study, the apparent nutritive value of food available for consumption by the Canadian population between 1960 and 1975 is examined, using time series and cross-sectional data.

Data from Statistics Canada's *Apparent Per-Capita Domestic Disappearance* were used to provide annual time series information regarding the availability of food at the retail level. While these data do not provide accurate information regarding the consumption of food by a population, they do indicate the amount of food potentially available for consumption. The Household Family Food Expenditure Surveys, on the other hand, provide a useful cross-sectional analysis of food purchased for consumption among income groups, urbanization groups, regions, and other stratifications. For comparison, the nutritive value of food actually consumed by Canadians, as determined from Nutrition Canada data, have also been included.

Results reported in this study are generally consistent with *a priori* expectations and with those of similar studies.

FOREWORD

The objective of this study is to provide discussion of the nutritive value of food available for consumption by the Canadian population during the period 1960-75. Historical trends in the nutritive value of food available for purchase by the Canadian population were based on data obtained as a residual to the calculation of food balance sheets. The nutritive value of food purchased by Canadian families in 1969 and 1974 was also determined using data obtained from the Statistics Canada family food expenditure surveys. The results obtained from these sources were compared with the findings of the Nutrition Canada Survey, which was based on a clinical assessment of the actual nutritional status of Canadians.

The nutrient composition data base compiled for this study is currently being used by Statistics Canada to calculate the nutritive value of foods as published annually in *Apparent Per Capita Consumption in Canada*. These data enable trend analysis of the nutritive value of food available for consumption in Canada for the post-1975 period.

I wish to extend my thanks to the many people who were involved in the completion of this study.

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SUMMARY

Data for this study of the nutritive value of food available for consumption by Canadians during the years 1960 to 1975 were derived from several issues of the Statistics Canada's *Apparent Per Capita Domestic Disappearance of Food* and from the 1969 and 1974 Family Food Expenditure Survey publications. Average nutrient intakes determined from the per-capita domestic disappearance data were compared with those calculated from the Family Food Expenditure Survey and Nutrition Canada Survey data. Some highlights of the study follow.

- Per-capita food energy available for consumption was relatively stable and ranged between 2974 calories (12 443 kilojoules) in 1961 and 3257 calories (13 627 kilojoules) in 1972. The most noticeable changes since 1960 are a decreased proportion of energy from dairy products, cereals, and sugars and syrups, and an increased proportion from meat, and fats and oils.
- Between 1960 and 1975 the proportion of calories derived from protein remained stable (between 11.6 and 11.9 percent), while that from fat increased slightly (from 39.3 to 41.8 percent), and that from carbohydrate decreased (from 49.7 to 47.1 percent).
- Per-capita protein availability remained relatively stable, ranging from a low of 87.0 g a day in 1962 to a high of 94.6 g in 1975. Over the 1960–75 period, the trend has been to derive a greater proportion of protein from meat and poultry and a smaller proportion from dairy products and eggs. Vegetable products (pulses and nuts) are also increasing in importance as a source of dietary protein.
- Per-capita availability of fat has increased steadily from a low of 130.6 g a day in 1961 to a high of 152.2 g in 1972. A shift from animal fats (butter and lard) to vegetable fats (margarine, shortening and shortening oils, salad oils, and cooking oils) can also be noted. Fats and oils, meat, and dairy products continue to be the primary sources of dietary fat.
- The availability of carbohydrates for consumption on a per-capita basis has been relatively steady with a low of 367.74 g in 1961 and a high of 391.9 g in 1965. Cereals, and sugars and syrups are the primary sources of dietary carbohydrate (about 75 percent of the total). In 1974, however, the consumption of sugar fell dramatically because of high prices.
- Calcium availability decreased over the period from 1960 to 1975, with peak availability in 1966 at 1008.4 mg. The availability of phosphorus, however, exhibited slight year-to-year variations ranging between 1440.7 mg (1962) and 1514.8 mg (1969). The dairy-product contribution to calcium decreased over the period, from 81.3 to 76.4 percent. While the contributions to total phosphorus availability from dairy products and cereals also decreased, the contribution by meat increased.
- The trend for total iron availability was slightly upward, with a low of 14.4 mg in 1961 and a high of 15.5 mg in 1972. A large share of the iron available for consumption is due to the enrichment of cereals. Other food groups contributing significantly to iron intake were meat, fruit, and vegetables.

- Over the 1960–75 period, the availability of vitamin A showed a downward trend with a high of 1160.0 Retinol Equivalents (RE) in 1960 and a low of 1064.6 RE in 1968. Vitamin A contributions by meat and eggs have decreased, while those by dairy products and fats and oils have remained relatively constant. However, one must consider that without the fortification of margarine, there would have been a significant decrease in the vitamin A available for consumption.
- Cereals are the primary source of thiamine, riboflavin, and niacin, with high contribution levels maintained by the enrichment of breakfast cereals and flour. The availability of riboflavin and niacin for consumption showed an increasing trend for the period, while thiamine availability showed a declining trend. While the contribution by dairy products to total thiamine, riboflavin, and niacin decreased over the period from 1960 to 1975, as did the contribution by cereals to thiamine and niacin, the contribution by meat to riboflavin and niacin increased slightly.
- The availability of ascorbic acid for consumption decreased from 1960 to 1965, and increased from 1966 to 1975. Primary contributors to ascorbic acid intake are potatoes, tomatoes and tomato products, and citrus fruit.
- The availability of total folate remained fairly stable from 1960 to 1973, with a small increase in the subsequent two years.
- The amount of food energy and macronutrients (protein, fat, and carbohydrates) available to Canadians as determined from data in *Apparent Per Capita Domestic Disappearance* is significantly higher than from those in the Nutrition Canada Survey as disappearance data do not allow for nutrient losses incurred along the food chain from producer to consumer — losses resulting from trimming, processing, food loss due to spoilage, table waste, etc.
- In 1974, families and unattached individuals in the first income quintile appeared to derive a greater amount of food energy from food consumed at home (2278.4 calories or 9524 kilojoules) than did all families (2156.6 calories or 9023 kilojoules). Families and unattached individuals in the fifth quintile, on the other hand, appeared to derive less food energy from food at home (2108.7 calories or 8823 kilojoules) than all families.
- Families and unattached individuals in both the first and fifth quintiles had apparent protein intakes above the all-families' intake of 69.0 grams (71.4 and 69.5 grams, respectively). Apparent fat intake for families and unattached individuals in the first quintile (107.0 g) was above that of all families (104.9 g) in 1974, while families and unattached individuals in the fifth quintile showed an apparent fat intake equal to that of all families. Families and unattached individuals in the first quintile showed apparent carbohydrate intakes significantly higher than those of all families (262.6 g as compared to 238.7 g). Families and unattached individuals in the fifth quintile had an apparent carbohydrate intake less than that of all families (226.1 g in 1974).

Finally, the results reported in this study are generally consistent with *a priori* expectations and with those reported in similar recent studies. While the results contained in this study may be used in the formulation of policy decisions regarding the nutritional status of Canadians, limitations of the data, as outlined in Section 3, must be noted.

1. INTRODUCTION

Nutrients are those components of food that provide the body with energy and are also essential for its repair and growth. A proper mix of foods, therefore, is necessary to provide all the nutrients in proportions necessary for a high performance level of bodily functions.

A number of factors such as changes in food supplies, changes in personal income and the marketing of new foods can bring about changes in the food consumption pattern. Changes in the food consumption pattern, therefore, provide a basis for assessing the trends in the availability of food energy and selected nutrients for consumption by the Canadian population. Such information is valuable for formulating regulations pertaining to the composition of processed foods and for recommending food enrichment levels. An awareness of the trends in nutrient availability from food consumed can also assist nutritionists, health

educators, and social workers in correctly identifying the dietary changes needed to keep Canadians physically fit and capable of high performance.

This study will attempt to provide information concerning the nutritive value of food available for consumption in Canada. For this purpose, data on the availability of food for consumption are taken from two sources: *Apparent Per-Capita Domestic Disappearance of Food in Canada, 1960–1975* and data from the 1969 and 1974 family food expenditure surveys carried out by Statistics Canada¹ in fourteen cities. In addition, this report will provide supplementary information concerning the levels of nutrient intake recommended by Health and Welfare Canada in the *Canadian Dietary Standard*.

¹ Statistics Canada, *1969 Family Food Expenditure Survey* and Statistics Canada, *1974 Urban Family Food Expenditure Survey*.

2. RECOMMENDED INTAKES OF NUTRIENTS

Levels of energy and essential nutrients considered adequate, on the basis of scientific data, to support normal functioning in most healthy Canadians are outlined in the *Dietary Standard for Canada*.¹ Because the recommended nutrient levels meet the average nutritional requirements of every age, weight, and sex group, they exceed the minimum needs of most individuals. Dietary recommendations are not intended, however, to cover therapeutic needs. The recommended amounts are generally considered to contain adequate reserves of nutrients that can be stored in the body. Energy recommendations are based on estimated energy requirements of average persons within an age-sex group (Table 2.1).

Nutritional requirements are generally classified for age, weight, sex, and physiological state, as it is recognized that nutrient requirements of the body change during periods of rapid body growth and during pregnancy and lactation. No distinction is made between males and females up to the age of seven, as weight ranges are similar for this age group.

Intakes recommended by the United States and the Food and Agriculture Organization (FAO) (Tables 2.2 and 2.3) have been included to illustrate that recommendations tend to vary slightly from country to country, primarily because population and environmental conditions and the interpretations of adequate levels of nutrient intake also vary. Allowances for each nutrient and several trace elements as given in the *Dietary Standard for Canada*, are summarized below.

2.1. Food energy

All energy used by the body is derived from the organic compounds present in foods. In Canada, carbohydrates provide approximately 49 percent of the calories, fat 41 percent, and protein 11 percent. Energy intake from alcohol is not included in these

figures. There is evidence that the average consumption of alcoholic beverages by Canadian adults provides 175 to 200 calories (732 to 837 kJ) per day.²

Energy requirement is in proportion to the size of an individual and is commonly expressed in relation to weight, surface, or lean body mass. In addition to size, several other factors affect energy needs, namely: age, physiological state (growth, pregnancy, lactation, etc.), level of activity, and climatic conditions.

Estimates of energy needs from dietary surveys and from experimental studies of energy expenditure present enough similarity to allow reasonably firm recommendations to be made for well-defined groups. However, because of the multiplicity of factors affecting energy requirements, it is difficult to predict accurately the energy needs of individuals.

2.2. Protein

Proteins are made up from approximately 20 different amino acids; of these the eight or nine that are not synthesized in the body are considered essential, that is, they must be present in the diet. The quality of dietary protein depends on the relative quantities of the different amino acids and their availability to the body. Because dietary patterns vary from group to group and individual to individual, it is difficult to arrive at an estimate of dietary protein intake applicable to a population. Typically, Canadian diets contain approximately two thirds of protein from animal sources and one third from vegetable sources.

Recommendations for protein intake assume that individuals are in good health, that calorie requirements are met and that intakes of other nutrients are adequate.

2.3. Calcium and iron

Calcium absorption has been known to vary widely according to intake and need. The recommended dietary intakes are based on skeletal needs, which are subject to wide variations. Essential functions of soft-tissue calcium can be carried out normally with minimal intakes of calcium.

The Canadian mixed diet provides 5 to 6 mg of iron per 1000 calories. Meat, poultry, and fish supply 25 to 30 percent of the total iron requirement, while cereals provide about a third. The amount of dietary iron required to maintain balance is determined by the age, sex, and physiological state of the individual and by his or her body's efficiency of absorption. It also depends on the level of iron stores considered desirable at maturity.

2.4. Niacin and vitamin A

Recommended intakes of niacin are sufficient to allow for differences in the amounts of preformed niacin, the contribution by tryptophan to preformed niacin, and for the availability of niacin from various diets.

Vitamin A is derived from animal products such as liver, kidney, milk, and eggs, and from fruits and vegetables. When the amount of vitamin A in the food exceeds immediate needs, much of the surplus is retained in the liver and can be used later if the dietary supply is curtailed. Consequently, well-fed individuals can probably tolerate several months of depletion. As vitamin A is a fat-soluble vitamin, caution and restraint are necessary in the use of concentrates and other highly potent preparations, as they may prove toxic. Foods, however, have rarely provided harmful quantities of vitamin A.

2.5. Ascorbic acid

Estimates of human requirements for vitamin C have been made by determining the amount of the vitamin necessary to prevent the deficiency disease scurvy, the amount of vitamin C metabolized per day and the amount of vitamin C necessary to maintain tissue levels of the vitamin. Variations in requirements among individuals are due, in part, to differences in

body weight. There is no evidence to indicate that age changes the vitamin C requirement of adults.

It should be emphasized that the recommended intakes of vitamin C are considered sufficient to cover the daily needs of healthy individuals. Considerable publicity has attended assertions that intakes of vitamin C far in excess of physiological requirements are of value in counteracting diseases such as the common cold. However, evidence for these assertions is equivocal, and it is possible that continued excessive use of vitamin C is harmful.

It should be emphasized that the recommended intakes of nutrients should be constituted by eating a variety of foods because unknown nutrients, essential for the maintenance of health, may be present. Moreover, knowledge about the interactions between nutrients derived from different sources is incomplete. Recommended intakes do not have to be met on a daily basis as long as weekly average intakes correspond to the recommended levels.

Based on the data contained in the *Dietary Standard for Canada*, a general food plan, namely Canada's Food Guide (Appendix N) has been constructed, in which the quantitative expressions of nutrients (in terms of mg, g, etc.) have been converted into food groups for use by the layman. To be effective, food guides should describe a pattern of food use which will ensure an adequate intake of nutrients (as judged against national recommendations such as those in the *Canadian Dietary Standard*) with maximum conformity to existing patterns of food use and with maximum flexibility in the choice of particular foods (McClinton, Milne, and Beaton [1971]). Therefore, it is important to note that the food plan has been adapted to reflect the common dietary practices of the Canadian population.

One must conclude, therefore, that the *Dietary Standard* is a very useful tool in relating nutrient needs to food consumption and evaluating the dietary practices of Canadians.

¹Health and Welfare Canada, *Dietary Standard for Canada*.

²The Alcoholism Commission of Saskatchewan, Research Division, *Statistics of Alcohol Use and Alcoholism in Canada, 1949-1971*.

TABLE 2.1. RECOMMENDED DAILY NUTRIENT INTAKE FOR CANADA — REVISED 1975

Age or Category	Sex	Weight kg	Height cm	Energy ^a		Protein g	Water-Soluble Vitamins					Fat-Soluble Vitamins		Minerals		
				kcal	kJ		Thiamine mg	Niacin NE ^e	Riboflavin mg	Folate ^f μ	Vitamin C mg	Vitamin A ^h RE	Calcium mg	Phosphorus mg	Iron mg	
0-6 mo.	Both	6	—	kg × 117	kg × 490	kg × 2.2(2.0) ^d	0.3	5	0.4	40	20 ^g	400	500 ⁱ	250 ^j	7 ⁱ	
7-11 mo.	Both	9	—	kg × 108	kg × 452	kg × 1.4	0.5	6	0.6	60	20	400	500	400	7	
1-3	Both	13	90	1 400	5 858	22	0.7	9	0.8	100	20	400	500	500	8	
4-6	Both	19	110	1 800	7 531	27	0.9	12	1.1	100	20	500	500	500	9	
7-9	M	27	129	2 200	9 205	33	1.1	14	1.3	100	30	700	700	700	10	
	F	27	128	2 000	8 368	33	1.0	13	1.2	100	30	700	700	700	10	
10-12	M	36	144	2 500	10 460	41	1.2	17	1.5	100	30	800	900	900	11	
	F	38	145	2 300	9 623	40	1.1	15	1.4	100	30	800	1 000	1 000	11	
13-15	M	51	162	2 800	11 715	52	1.4	19	1.7	200	30	1 000	1 200	1 200	13	
	F	49	159	2 200	9 205	43	1.1	15	1.4	200	30	800	800	800	14	
16-18	M	64	172	3 200	13 389	54	1.6	21	2.0	200	30	1 000	1 000	1 000	14	
	F	54	161	2 100	8 786	43	1.1	14	1.3	200	30	800	700	700	14	
19-35	M	70	176	3 000	12 552	56	1.5	20	1.8	200	30	1 000	800	800	10	
	F	56	161	2 100	8 786	41	1.1	14	1.3	200	30	800	700	700	14	
36-50	M	70	176	2 700	11 297	56	1.4	18	1.7	200	30	1 000	800	800	10	
	F	56	161	1 900	7 950	41	1.0	13	1.2	200	30	800	700	700	14	
51 +	M	70	176	2 300 ^b	9 623	56	1.4	18	1.7	200	30	1 000	800	800	10	
	F	56	161	1 800 ^b	7 531	41	1.0	13	1.2	200	30	800	700	700	9	
Pregnancy				+300 ^c	+1 255	+20	+0.2	+2	+0.3	+50	+20	+100	+500	+500	+1 ^j	
Lactation				+500	+2 092	+24	+0.4	+7	+0.6	+50	+30	+400	+500	+500	+1 ^j	

^a Recommendations assume characteristic activity pattern for each group.^b Recommended energy intake for age 66+ years reduced to 2000 kcal (8368 kJ) for men and 1500 kcal (6.3 MJ) for women.^c Increased energy intake recommended during 2nd and 3rd trimesters. An increase of 100 kcal (418.4 kJ) per day is recommended during the 1st trimester.^d Recommended protein intake of 2.2 g/kg body weight for infants aged 0-2 months and 2.0 g/kg body weight for those aged 3-5 months. Protein recommendation for infants aged 0-11 months assumes consumption of breast milk or protein of equivalent quality.^e NE (niacin equivalent) is equal to 1 mg of niacin or 60 mg of tryptophan.^f Recommendations given in terms of free folate.^g Considerably higher levels may be prudent for infants during the first week of life to guard against neonatal tyrosinemia.^h IRE (retinol equivalent) corresponds to a biological activity in humans equal to 1 μ retinol (3.33 IU) or 6 μ B-caroten (10 IU).ⁱ The intake of breast-fed infants may be smaller than the recommendation but is considered to be adequate.^j A recommended total intake of 15 mg daily during pregnancy and lactation assumes the presence of adequate stores of iron. If stores are suspected of being inadequate, additional iron as a supplement is recommended.Source: Health and Welfare Canada, *Canadian Dietary Standard* (Ottawa: Supply and Services Canada, 1975).

TABLE 2.2. RECOMMENDED DAILY DIETARY ALLOWANCES FOR THE UNITED STATES,^a REVISED 1980

Category	Fat-Soluble Vitamins						Water Soluble Vitamins				Minerals					
	Age	Weight		Height		Energy	Protein	Vitamin A		Folacin	Niacin	Ribo- flavin	Thiamine	Calcium	Phos- phorus	Iron
		years	kg	lb	cm			in	Activity							
Infants	0.0-0.5	6	13	60	24	$\text{kg}^c \times 115$	g	RE ^e	mg	μ^f	NE ^g	mg	mg	mg	mg	mg
	0.5-1.0	9	20	71	28	$\text{kg}^c \times 105$	$\text{kg} \times 2.0$	420	35	30	6	0.4	0.3	360	240	10
Children	1-3	13	29	90	35	1300	23	400	35	45	8	0.6	0.5	540	360	15
	4-6	20	44	112	44	1700	30	400	45	100	9	0.8	0.7	800	800	15
	7-10	28	62	132	52	2400	34	500	45	200	11	1.0	0.9	800	800	10
Males	11-14	45	99	157	62	2700	45	700	45	300	16	1.4	1.2	800	800	10
	15-18	66	145	176	69	2800	56	1000	50	400	18	1.6	1.4	1200	1200	18
	19-22	70	154	177	70	2900	56	1000	60	400	18	1.7	1.4	1200	1200	18
	23-50	70	154	178	70	2700	56	1000	60	400	18	1.6	1.5	800	800	10
	51 +	70	154	178	70	2400 ^d	56	1000	60	400	16	1.4	1.2	800	800	10
Females	11-14	46	101	157	62	2200	46	800	50	400	15	1.3	1.1	1200	1200	18
	15-18	55	120	163	64	2100	46	800	60	400	14	1.3	1.1	1200	1200	18
	19-22	55	120	163	64	2100	44	800	60	400	14	1.3	1.1	800	800	18
	23-50	55	120	163	64	2000	44	800	60	400	13	1.2	1.0	800	800	18
	51 +	55	120	163	64	1800 ^d	44	800	60	400	13	1.2	1.0	800	800	10
Pregnant Lactating					+300	+30	+200	+20	+400	+400	+2	+0.3	+0.4	+400	+400	^h
					+500	+20	+400	+40	+100	+100	+5	+0.5	+0.5	+400	+400	^h

^a The allowances are intended to provide for individual variations among most normal persons living in the United States under usual environmental stresses. Diets should be based on a variety of common foods in order to provide nutrients not listed here for which human requirements have been less well defined.

^b Kilojoules (kJ) = 4.2 × kcal.

^c Body weight.

^d Requirements for energy at 51 to 75 years. Males over 76 years should decrease energy intake to 2050 kcal and females 76+ years to 1600 kcal.

^e Retinol equivalents: 1 retinol equivalent is equal to 1 μ retinol or 6 μ B-carotene.

^f The folacin allowances refer to dietary sources as determined by Lactobacillus casei assay.

^g One niacin equivalent (NE) is equal to 1 mg of niacin or 60 mg of dietary tryptophan.

^h This increased requirement cannot be met by ordinary diets; therefore, the use of supplemental iron is recommended.

Source: Food and Nutrition Board, *Recommended Dietary Allowances* (Washington, D.C.: U.S. Government Printing Office, 1980).

TABLE 2.3. RECOMMENDED INTAKES OF NUTRIENTS — FAO/WHO, 1974

Age in Years or Category	Body Weight	Energy ^a		Protein ^{ab}		Vitamin A ^d	Thiamine ^c	Ribo- flavin ^c	Niacin ^c	Folic acid ^e	Ascorbic acid ^e	Calcium ^f	Iron ^g
	kg	kcal	MJ	g	μ	μ	mg	mg	mg	μ	mg	g	mg
Children													
Under 1	7.3	820	3.4	14	300		0.3	0.5	5.4	60	20	0.5-0.6	5-10
1-3	13.4	1360	5.7	16	250		0.5	0.8	9.0	100	20	0.4-0.5	5-10
4-6	20.2	1830	7.6	20	300		0.7	1.1	12.1	100	20	0.4-0.5	5-10
7-9	28.1	2190	9.2	25	400		0.9	1.3	14.5	100	20	0.4-0.5	5-10
Male adolescents													
10-12	36.9	2600	10.9	30	575		1.0	1.6	17.2	100	20	0.6-0.7	5-10
13-15	51.3	2900	12.1	37	725		1.2	1.7	19.1	200	30	0.6-0.7	9-18
16-19	62.9	3070	12.8	38	750		1.2	1.8	20.3	200	30	0.5-0.6	5-9
Female adolescents													
10-12	38.0	2350	9.8	29	575		0.9	1.4	15.5	100	20	0.6-0.7	5-10
13-15	49.9	2490	10.4	31	725		1.0	1.5	16.4	200	30	0.6-0.7	12-24
16-19	54.4	2310	9.7	30	750		0.9	1.4	15.2	200	30	0.5-0.6	14-28
Adult man (moderately active)	65.0	3000	12.6	37	750		1.2	1.8	19.8	200	30	0.4-0.5	5-9
Adult woman (moderately active)	55.0	2200	9.2	29	750		0.9	1.3	14.5	200	30	0.4-0.5	14-28
Pregnancy (later half)		+350	+1.5	38	750		+0.1	+0.2	+2.3	400	30	1.0-1.2	^h
Lactation (first 6 months)		+550	+2.3	46	1200		+0.2	+0.4	+3.7	300	30	1.0-1.2	^h

^a *Energy and Protein Requirements*. Report of a Joint FAO/WHO Expert Group (Rome: FAO, 1972).

^b As egg or milk protein.

^c *Requirements of Vitamin A, Thiamine, Riboflavin and Niacin*. Report of a Joint FAO/WHO Expert Group (Rome: FAO, 1965).

^d As retinol.

^e *Requirements of Ascorbic Acid, Vitamin D, Vitamin B₁₂, Folate and Iron*. Report of a Joint FAO/WHO Expert Group (Rome: FAO, 1970).

^f *Calcium Requirements*. Report of a FAO/WHO Expert Group (Rome: FAO, 1961).

^g On each line the lower value applies when over 25 percent of calories in the diet come from animal foods, and the higher value when animal foods represent less than 10 percent of calories.

^h For women whose iron intake throughout life has been at the level recommended in this table, the daily intake of iron during pregnancy and lactation should be the same as that recommended for non-pregnant, non-lactating women of childbearing age. For women whose iron status is not satisfactory at the beginning of pregnancy, the requirement is increased, and in the extreme situation of women with no iron stores, the requirement can probably not be met without supplementation.

^{Source:} Food and Agriculture Organization of the United Nations, *Handbook on Human Nutritional Requirements* (Rome: FAO, 1974).

3. SOURCES AND LIMITATIONS OF DATA USED IN THE STUDY

The objectives of this section are twofold: first, to provide a brief description of the data sources, and the procedure used to calculate the nutritive value of food; and second, to discuss the assumptions made regarding the food items included in the study.

3.1. Data sources and limitations

The sources of data used for the present study are *Apparent Per Capita Domestic Disappearance of Food in Canada*, for 1960 to 1975, the *1969 Family Food Expenditure Survey*, and the *1974 Urban Family Food Expenditure Survey*.

Apparent Per Capita Domestic Disappearance data provide annual time series information regarding the availability of food at the retail level after consideration of production, imports and exports, beginning and ending stocks, seed requirements, manufacturing inputs, livestock feed, and waste. No allowance is made for food losses or wastage from commercially grown food occurring in stores and homes, nor for foods grown at home. Therefore, while food disappearance data do not provide accurate information regarding the consumption of food by a population, they do indicate the amount of food potentially available for consumption.

Food disappearance data are unavailable for some commercially processed foods. This is a serious omission because in the past 10 to 15 years an increasing number of processed and manufactured products (Gullett 1974) such as cake mixes, ready-to-serve meals and fruit-drink crystals have been available on the Canadian market. Watts *et al.* [1977] arrived at estimates of food consumption trends for some of these products by comparing percentage increases in Statistics Canada shipment and tonnage figures to percentage increases in the

population for a specific period of time. However, there are limitations to this type of data comparison, namely, the exclusion of imports and exports, that the reporting of shipments is restricted to those of the larger establishments, that imports and exports are excluded, and that figures in particular years are not reported because the sample of manufacturers is too small. Also, methods of detailed reporting may vary from period to period; hence there are some gaps and inconsistencies in the detail of data for some product categories. Despite these limitations, the nature of the changes that have occurred in recent years in processed and manufactured products can be observed.

Statistical data concerning apparent food disappearance do not distinguish between food consumed at home and that consumed away from home. While statistics exist on total restaurant receipts and on the number of franchises associated with food-serving outlets, they do not indicate which foods were sold. Some indications are available concerning vending-machine sales, such as are expansion in the categories of hot foods and soups, hot and cold beverages including milk, and confectionery items.

While *Apparent Per-Capita Domestic Disappearance* data facilitate an examination of trends in the average availability of food for consumption by Canadians over time, *Food Expenditure Survey* data enable cross-sectional analyses of household food purchasing patterns among income groups, urbanization groups, regions, and other stratifications. This study uses information on a sample of families and unattached individuals living in private households in 14 major cities: St. John's Halifax, Saint John, Montreal, Quebec City, Ottawa, Toronto, Thunder Bay, Winnipeg, Regina, Calgary, Edmonton, and Vancouver.

The 1974 *Urban Food Expenditure Survey* consisted of two samples (main and special). The main part of the sample (5245 families) was randomly drawn from all households in the cities listed above. The special part of the sample (746 families) was drawn from households at the lower end of the income distribution. Respondents were asked to keep diaries of food purchases for two consecutive weeks. Only diaries that provided complete responses for a period of at least one week were used in the analyses. The 1969 *Family Food Expenditure Survey* was national in scope and included both rural and urban families. From the 1969 survey data a sample was extracted which was representative of the population in the 1974 survey. In this way, data were made available which allowed a comparison between urban families in the same income quintile groups, in the two time periods.

Since it was not feasible to calculate the average nutrient content of meals eaten away from home and of some foods purchased for home consumption, they were excluded from the study. The excluded categories were certain frozen foods (other desserts and specialties, fish dinners, Chinese and Italian foods, and other foods) and prepared and partially prepared dishes (meat and poultry dinners, Chinese dinners, food carried out of restaurants and stores, and other foods).

3.1.1. Disappearance versus survey data

Differences between food disappearance and survey data can be summarized in a tabular format as follows:

Item Compared	Food Disappearance Data	Family Food Expenditure Survey Data
Level of Examination	Time series	Cross-sectional
Food Used by Institutions	Includes food used by institutions — data obtained from supply-disposition tables	Excludes food used by institutions — data obtained from surveys of private household purchases
Food Eaten Away from Home	Includes food eaten away from home — as separate figures are not available	Excludes food eaten away from home — as representative nutrient values are not available
Processed Foods	Includes foods in the unprocessed form for bakery products and meats (carcass basis)	Includes foods in the processed state as purchased (i.e., bread, retail cuts of meat, etc.)

3.2. Procedure

The method used to calculate the apparent nutritive value of food available for consumption in Canada is similar to that used in the United States (USDA 1965). Kilograms per capita of each food available for consumption are multiplied by the food's nutritive value "as purchased." Current estimates of domestic food disappearance include data on approximately 150 major foods. These foods were assumed to be in good condition when purchased, with an average amount of refuse.

With few exceptions the food composition values used in the calculations were those in the *Nutrition Canada Survey Food Nutrient Conversion File* produced by Health and Welfare Canada. The values which are year average nutrients in U.S. foods, are based on those in USDA's *Composition of Foods . . . Raw, Processed, Prepared*. In addition, total folate has been included, as well as a section on Canadian foods reflecting Canadian enrichment and fortification levels (See 3.3, "Assumptions.") Nutrient values used for dairy products were those in USDA's *Composition of Foods, Dairy and Egg Products*.

Food values obtained from the food-nutrient conversion file are in terms of nutrients per 100 g, edible portion. Therefore, it was necessary to convert the food values into nutrients per 100 g as purchased¹ before applying them to disappearance data and survey data. The factors used for the conversion do not account for nutrient loss as a result of the cooking, storage, and wastage of food, as the amount varies greatly from food to food and from family to family, and because some nutrients are affected more than others in the cooking process.

3.3. Assumptions

3.3.1. Meat

Meat supplies are estimated in terms of carcass weight in the food balance sheets. Statistics Canada converts the warm dressed carcass weight to cold dressed carcass weight by subtracting the shrinkage and weight of kidney and tongue meat and adding an estimate of the weight of head meat.²

3.3.1.1. Beef

The warm dressed weight, excluding kidney and kidney fat, as reported in Agriculture Canada's *Annual Livestock Market Review*, is reduced by 3 percent for shrinkage. Then 2.0412 kg per carcass are added to account for head meat recovery. The

result is the cold dressed carcass weight.³ Except for all A₄ carcasses and some A₃ carcasses, which are trimmed in the plants before shipping, it is assumed that more fat is trimmed until the carcass reaches the retail chain store.

Kidney and kidney fat are not included in the Canadian disappearance data for beef. The U.S. nutrient values used are for carcasses including kidney and kidney fat, nutrient values for carcasses without kidney and kidney fat not being available. Hence, adjustments in the nutrient values for beef were necessary to exclude kidney and kidney fat (Table 3.1).

It was assumed that a 283.5-kg carcass would contain an average of 9.07 kg of kidney fat (suet) or 3.2 percent of the total carcass weight, and that it would also contain an average of 0.57 kg of kidney meat (0.2 percent of the total).⁴ The percentages were applied to the nutrient values for suet (2228)⁵ and kidney meat (1159) and removed from the nutrient values for beef. A subsequent factor of 0.84 is applied to the nutrient values to account for refuse.⁶

In September, 1972, a new beef grading system came into effect. Prior to this grading change, Canada Choice and Canada Good beef, which constituted more than 50 percent of the beef carcasses slaughtered, were equivalent to U.S. Choice and U.S. Good beef.⁷ Therefore, the nutrient values used, for the period from 1960 to 1972, are an average of Choice (209) and Good (210) carcasses, as purchased. After 1972, A₁ and A₂ slaughter averaged approximately 70 percent of the total slaughter. A₁ and A₂ carcasses are approximately equivalent to U.S. Grade 2 Choice and Good Grade beef.⁸ Therefore, the nutrient values used for the years from 1973 to 1975 are the same as those for U.S. Good Grade beef (210).

Between 1960 and 1968, imports accounted for 2.2 percent of the total beef supply in Canada. Since 1969, imports have increased significantly, bringing the average for the 1960–75 period to 4.8 percent. A portion of the imports, primarily those from Australia and New Zealand, is in the form of boneless beef. Statistics Canada nevertheless assumes that all imported beef is equivalent to Canadian carcass. Since imported boneless beef has constituted, on the average, only about 4.0 percent of the total Canadian beef supply since the mid-1960s, this assumption is not expected to alter the results significantly.

3.3.1.2. Pork

Canadian pork carcasses are dressed with the head on and kidney and leaf lard retained. From the warm dressed carcass weight 3 percent were subtracted for

shrinkage, and a further 17 percent to account for larding fat (leaf lard and backfat). Then 680.4 g per carcass were deducted to account for the kidney and tongue left in the warm dressed carcass. The remainder represents the cold trimmed carcass weight.⁹

Larding fats, while excluded from the Canadian cold trimmed carcass weight, are included in the USDA nutrient values for pork. Therefore, a downward adjustment in the Canadian nutrient values per 100 g of pork must be made (Table 3.2). The nutrient values in 17 percent of 100 g backfat (medium-fat class 1672b) were subtracted from the nutrient values for 100 g of pork (medium-fat class 1662). The resulting values are the nutrients in 83 percent of 100 g of pork excluding larding fat. The nutrients were then calculated on a 100-g basis. A subsequent factor of 0.75 was applied to the nutrient values to allow for skin, bones, etc.¹⁰ This resulted in a figure of 28.4 percent fat in pork.

The nutrient values of pork exclude some of the head meat, as U.S. pork carcasses are dressed with head off but jowl on, whereas Canadian pork carcasses are dressed with head on. The head, excluding the tongue, accounts for 5.3 percent of the cold trimmed carcass weight, or approximately 3.36 kg. Of this, refuse includes skin, fat, and bone. Therefore, very little head meat is actually available for consumption (453.6 g of scalp, 317.5 g of head meat and 90.7 g of brains per carcass). As a result, no alteration was made in the nutrient values to include head meat. However, the refuse factor for pork was increased by 4.0 percent to exclude the non-edible portion of the head from the nutrient values.

In December, 1968, the grading system for Canadian pork was changed. Despite this change, the majority of Canadian pork carcasses, for the period from 1960 to 1975, are approximately equivalent to U.S. medium-fat pork carcasses.¹¹

3.3.1.3 Lamb and mutton

The warm dressed carcass weight was reduced by 3 percent for shrinkage and 90.7 g per carcass for the kidney. To the remainder, 181.4 g per carcass were added for head meat recovery. The result is the cold dressed carcass weight.¹²

Although separate figures are not available for lamb and mutton, consumption is mostly of lamb.

Nutritive values are not available on a carcass basis in the Nutrition Canada *Food-Nutrient Conversion File*. The values used, therefore, were for fresh lamb carcasses (114) raw, as purchased, in the *Table of Food Values Recommended for Use in Canada*, published by Health and Welfare Canada. A factor of 0.78 was applied to the nutrient values to allow for refuse.¹³

3.3.1.4. Veal

The warm dressed carcass weight was reduced by 15 percent for shrinkage and skin removal, and 226.8 g per carcass to exclude the kidney weighted in the carcass. To the remainder, 362.9 g per carcass were added to account for head meat recovery. The resulting figure represents the cold dressed carcass weight.¹⁴

The majority of Canadian veal carcasses fall into the U.S. medium-fat to thin class.¹⁵ Therefore, an average of the nutrient values for medium-fat (2366) and thin carcasses (2367) excluding kidney was used. A factor of 0.79 was applied to medium-fat veal nutrient values and 0.77 was applied to thin veal nutrient values to allow for refuse.¹⁶

3.3.1.5. Edible offal

The total of all offal was divided among the various kinds of beef and pork organ meats consumed by humans, according to the approximate weight and edible yield for each, as provided by Canada Packers and Schneiders (Table 3.3).¹⁷

In Canada, other skeletal meats (tails, cheeks and head meat, back steaks, etc.) are not included in the edible offal, but are part of the total carcass weight. Representative nutrient values were assigned to each component: beef liver — 1266, pork liver — 1273, beef heart — 1110, pork heart — 1118, beef kidney — 1159, pork kidney — 1162, beef tongue — 2301, pork tongue — 2307, beef sweetbreads — 2240, beef tripe — 2316, and all brains — 438. A factor of 0.76 was applied to beef- and pork-tongue nutritive values to account for refuse. The nutrient values for each offal type were then weighted by their approximate share in offal consumption to arrive at a composite set of nutrient values for edible offal (Table 3.4).

3.3.2. Poultry

Estimates of per-capita domestic disappearance of fowl and chicken for before 1963 are available as a combined figure. To obtain separate estimates for these kinds of poultry for the period 1960–63, it is assumed that 18 percent of the domestic disappearance are fowl and 82 percent chicken.¹⁸ The estimates of per-capita domestic disappearance for

fowl are 1.696 kg in 1960, 1.878 kg in 1961, and 1.864 kg in 1962, and for chicken, 7.729 kg in 1960, 8.555 kg in 1961, and 8.500 kg in 1962. A factor of 0.70 was applied to fowl and chicken nutritive values to allow for bones.

3.3.3. Fishery products

It was assumed that Canadians consume fresh fish in the following proportions: lean fish 0.65, fatty fish 0.27, and shellfish 0.08.¹⁹ The average nutrient values for all fresh fish consumed were calculated by applying the above weights to their respective nutrient values (cod — 794b, salmon — 1948 and shrimp — 2042b). Nutrient values for canned fish were based on the weighted averages²⁰ for canned tuna (2324), salmon (1955), shellfish (2045A), and sardines (1976). The nutrient values used for cured fish were those of dehydrated and salted cod (797).

3.3.4. Dairy products (excluding butter)

Per-capita availability for consumption estimates of dairy products were made for food components. Nutrients in ice cream are for the milk in ice cream only, as the sugar and butter-fat content of ice cream are included in the sugar and butter disappearance values. It is assumed that only evaporated milk was fortified during the 1960–75 period. However, effective March 1, 1976, additional milk products (skim milk, partly skimmed milk, evaporated skim milk, evaporated partly skimmed milk, powdered whole milk, and powdered skim milk) are required to be fortified. It is also assumed that over the period considered, milk had a constant fat content: 3.3 percent fat for homogenized whole milk and 2.0 percent fat for partly skimmed milk.

3.3.5. Bakery and cereal products (including flour)

It is assumed that except for flour and prepared breakfast cereals, all bakery products (fresh, frozen, and in the form of mixes) and cereal products are unenriched. It is possible that some proportion of flour and breakfast foods are enriched above the minimum levels promulgated by the Canadian Food and Drug Regulations. Since the extent of enrichment cannot be determined, minimum levels of added iron, thiamine, riboflavin, and niacin were assumed.²¹

Composite nutritive values were used for most individual foods in the cereal group. The nutritive values for breakfast foods are a weighted average based on production data for wheat-, corn-, rice-, and oat-based cereals. It has therefore been assumed that 35 percent of breakfast cereals are wheat-based,

36 percent corn-based, 22 percent rice-based, and 7 percent oat-based. Representative cereals within each of the wheat, corn, and oat types were chosen, and the above weights applied to their nutritive values.

The increase in disappearance figures for breakfast foods in 1974 and 1975 is mainly due to the addition of infant cereals. As separate figures for infant cereals are available, they were subtracted from the disappearance figures for breakfast foods for 1974 and 1975 in order to obtain a consistent series.

An estimate of the percentage of total wheat flour enriched each year since 1960 is not available. According to U.S. survey data, 60 percent of wheat flour were assumed to be enriched for the period 1954–64. Health and Welfare Canada was advised by millers that by 1975 approximately 85 percent of Canadian flour was enriched.²² For the calculation of nutrients, it was assumed that 70 percent²³ of the total wheat flour in the entire 1960–75 period were enriched.

3.3.6. Fruit and vegetables

All canned fruits considered in the study were assumed to be packed in heavy syrup. Apple and grape juice were assumed to be fortified with vitamin C. On the average, it is assumed that 57 percent of fresh cherries are sweet and 43 percent sour. All fresh vegetables were assumed to be partially trimmed.

Disappearance data for processed fruits are expressed in retail weight rather than fresh equivalent, with the exception of tomatoes otherwise used, for which the fresh equivalent weight was taken, and the nutritive values used were for fresh tomatoes. It is assumed that there is a 50-percent split between tomato paste and tomato pulp or purée. Of the dried apples, 75 percent are dried and 25 percent dehydrated.

It is assumed that all canned grapefruit juice and blended orange and grapefruit juice are unsweetened, while 85 percent of canned orange juice are unsweetened and 15 percent sweetened.

In the few cases where disappearance data were not available for a particular year or years, figures were extrapolated from the data of the previous three years.

Because of the changing composition of unspecified fresh and frozen fruits and vegetables, no set of nutrient values was considered representative. These were, therefore, excluded from the calculation. As the domestic disappearance of these foods was very small, their exclusion is not expected to significantly affect the estimates of nutrient value intake from fruits and vegetables.

3.3.7. Fats and oils

In computing nutrients contributed by the fat and oil group, it is assumed that margarine is enriched with vitamin A. Enrichment is the process of adding a nutrient which is not normally present in a food or which is present in insignificant amounts (for example, vitamin A in margarine) or of upgrading a nutrient already present in a product to a general or average level for a particular food (for example, B-vitamins and iron in cereal products). The enrichment level assumed was 1058.0 RE (3522.0 International Units) per 100 g of margarine.²⁴

3.3.8. Sugar and other sweeteners

Disappearance data for sugars and other sweeteners do not include amounts used in manufacturing canned and frozen fruit. Nutrients in the sweeteners used in these processed products are included in their respective food groups.

International trade data indicate that for the period from 1960 to 1973 the "other sugar and syrup" group consisted mainly of corn syrup (glucose) and for 1974 and 1975 of Barbados molasses.

3.3.9. Pulses and nuts

Nutrient specifications for tree nuts were derived as a weighted average of all shelled and unshelled nuts. The weights were based on import data for the period from 1960 to 1976.

3.3.10. Non-alcoholic beverages

Disappearance data for cocoa beans were converted to a cocoa-powder equivalent by using a factor of 0.48, and nutritive values available for dry cocoa powder (783) were used.

Disappearance data for coffee were converted from green-bean equivalent to those for instant coffee by using a factor of 0.28.²⁵ The nutrient values represent only the soluble nutrients extracted in preparation. It was not feasible to estimate the small quantities of nutrients that may be furnished by tea.

Alcoholic beverages have been excluded from the study as consistent data series are not available for the period studied.

¹ Values of edible portion per 100 g were multiplied by the percentage edible per 100 g to give nutrients per 100 g "as purchased."

² Unpublished paper, "Methods and Concepts Used in Arriving at Per-Capita Disappearance of Meat," by B.E. Rosien of the Agriculture Division of Statistics Canada.

³ Rosien, B.E., "Methods and Concepts," *op. cit.*

⁴ Canadian Cattlemen's Association of Canada.

⁵ Figures in parentheses are the item numbers in the *Nutrition Canada Survey Food Nutrient Conversion File*.

⁶ USDA, *Composition of Foods — Handbook No. 8*, p. 72.

⁷ Based on consultation with commodity specialists.

⁸ Based on consultation with commodity specialists and the Canadian Cattlemen's Association of Canada.

⁹ B.E. Rosien, "Methods and Concepts," *op. cit.*

¹⁰ USDA, *Handbook No. 8*, p. 103.

¹¹ Based on consultation with commodity specialists.

¹² B.E. Rosien, "Methods and Concepts," *op. cit.*

¹³ Health and Welfare Canada. *Table of Food Values Recommended For Use in Canada*, p. 132.

¹⁴ B.E. Rosien, "Methods and Concepts," *op. cit.*

¹⁵ Based on consultation with commodity specialists.

¹⁶ USDA, *Handbook No. 8*, p. 118.

¹⁷ See also the Food Prices Review Board's, *Beef Pricing* (June 1974) and *Pork Pricing* (August 1974).

¹⁸ Based on the average percentage contribution by fowl and by

chicken to the combined domestic disappearance figure for fowl and chicken for the years 1963–65.

¹⁹ Based on data provided by Environment Canada, Fisheries Branch.

²⁰ Weights based on U.S. consumption figures (1964 consumption, 0.95 kg of canned tuna, 0.32 kg of salmon, 0.23 kg of shellfish, and 0.14 kg of sardines).

²¹ Minimum enrichment levels assumed per 28 g of flour are

iron	0.80 mg	riboflavin	0.07 mg
thiamine	0.12 mg	niacin	0.99 mg

Minimum enrichment levels assumed per 28 g of prepared breakfast cereal are

iron	4.0 mg	riboflavin	1.0 mg
thiamine	0.6 mg	niacin	6.0 mg

²² Millers' Association.

²³ Based on consultation with Health and Welfare Canada officials.

²⁴ Health and Welfare Canada, *Nutrient Value of Some Common Foods*.

²⁵ Based on consultation with various coffee manufacturers.

TABLE 3.1. METHODOLOGY FOR EXCLUDING THE NUTRITIVE VALUE OF KIDNEY AND KIDNEY FAT FROM BEEF

Since disappearance data exclude kidney and kidney fat and nutrient values include kidney and kidney fat, in order to exclude kidney and kidney fat from nutrient values assume that 1960–72 Canada Choice and Good beef = U.S. Choice and Good beef and that 1973–75 Canada A₁ and A₂ beef = U.S. Good beef.

Assume that all kidney fat removed is suet.

Removal of kidney fat

	Nutritive Value of 100 g of Kidney Fat (2228)	Nutritive Value of 3.2 g of Kidney Fat	
food energy	854.0 cal	27.3 cal	
protein	1.5 g	0.1 g	
fat	94.0 g	3.0 g	
	Nutritive Value of 100 g of Choice Beef (209)	Nutritive Value of 100 g of Choice Beef Minus 3.2 g of Kidney Fat	Nutritive Value of 100 g of Choice Beef Excluding Kidney Fat
food energy	318.4 cal	291.1 cal	300.7 cal
protein	12.5 g	12.4 g	12.8 g
fat	29.4 g	26.4 g	25.6 g
	Nutritive Value of 100 g of Good Beef (210)	Nutritive Value of 100 g of Good Beef Minus 3.2 g of Kidney Fat	Nutritive Value of 100 g of Good Beef Excluding Kidney Fat
food energy	271.3 cal	244.0 cal	252.1 cal
protein	13.9 g	13.8 g	14.3 g
fat	23.5 g	20.5 g	21.2 g

Removal of kidney meat

	1960–72		1973–75	
	Average Nutritive Value of 100 g of Choice and Good Beef	Average Nutritive Value of 100 g of Choice and Good Beef Excluding 0.2 g Kidney Meat	Average Nutritive of 100 g of Good Beef	Average Nutritive Value of 100 g of Good Beef Excluding 0.2 g Kidney Meat
food energy	276.4 cal	276.7 cal	252.1 cal	252.3 cal
protein	13.6 g	13.6 g	14.3 g	14.3 g
fat	23.4 g	23.4 g	21.2 g	21.2 g
carbohydrate	0.0 g	0.0 g	0.0 g	0.0 g
calcium	8.0 mg	8.0 mg	8.4 mg	8.4 mg
phosphorus	121.0 mg	120.8 mg	127.7 mg	127.5 mg
iron	2.0 mg	2.0 mg	2.1 mg	2.1 mg
vitamin A	16.4 RE	16.0 RE	15.1 RE	14.7 RE
thiamine	0.06 mg	0.06 mg	0.06 mg	0.06 mg
riboflavin	0.12 mg	0.11 mg	0.13 mg	0.12 mg
niacin	5.6 NE	5.6 NE	6.0 NE	6.0 NE
ascorbic acid	0.0 mg	0.0 mg	0.0 mg	0.0 mg
total folate	6.2 μ	6.1 μ	6.2 μ	6.1 μ

TABLE 3.2. METHODOLOGY FOR EXCLUDING THE NUTRITIVE VALUE OF LARDING FAT FROM PORK

Since disappearance data exclude larding fat (17%) and nutrient values include larding fat (17%), in order to exclude larding fat from the nutrient value of pork, assume that larding fat = backfat and that Canadian pork = U.S. medium-fat class for the entire period 1960-75.

Backfat Without Skin (medium-fat class 1672b)	Nutritive Value of 100 g of Backfat	Nutritive Value of 17 g of Backfat
food energy	827.0 cal	140.6 cal
protein	2.1 g	0.4 g
fat	90.7 g	15.4 g
carbohydrate	0.0 g	0.0 g
calcium	1.0 mg	0.2 mg
phosphorus	0.0 mg	0.0 mg
iron	0.3 mg	0.1 mg
vitamin A	0.0 RE	0.0 RE
thiamine	0.10 mg	0.02 mg
riboflavin	0.02 mg	0.00 mg
niacin	0.6 NE	0.1 NE
ascorbic acid	0.0 mg	0.0 mg
total folate	0.0 μ	0.0 μ

	Nutritive Value of 100 g of Pork Including Larding Fat (1662)	Nutritive Value of 83 g of Pork Excluding Larding Fat	Nutritive Value of 100 g of Pork Excluding Larding Fat
food energy	384.8 cal	244.2 cal	294.2 cal
protein	7.7 g	7.3 g	8.8 g
fat	39.0 g	23.6 g	28.4 g
carbohydrate	0.0 g	0.0 g	0.0 g
calcium	4.5 mg	4.3 mg	5.2 mg
phosphorus	77.3 mg	77.3 mg	93.1 mg
iron	1.1 mg	1.0 mg	1.2 mg
vitamin A	0.0 RE	0.0 RE	0.0 RE
thiamine	0.38 mg	0.36 mg	0.43 mg
riboflavin	0.09 mg	0.09 mg	0.11 mg
niacin	3.6 NE	3.5 NE	4.2 NE
ascorbic acid	0.0 mg	0.0 mg	0.0 mg
total folate	6.2 μ	6.2 μ	7.5 μ

TABLE 3.3. WEIGHT AND EDIBLE YIELD OF BEEF AND PORK OFFAL

Offal	Beef		Pork	
	weight/carcass kg	edible yield %	weight/carcass kg	edible yield %
Liver	4.54	81.6	1.27	77.0
Heart	1.63	96.4	0.23	89.0
Kidney	0.71	98.0	0.27	96.0
Tongue	1.32	98.3	0.18	90.0
Sweetbreads	0.45	80.0	—	0.0
Tripe	4.34	73.9	—	0.0
Brains	—	0.0	0.09	99.0

TABLE 3.4. DISTRIBUTION OF TOTAL OFFAL AMONG THE VARIOUS KINDS OF BEEF AND PORK ORGAN MEATS

Offal	Type	Percentage of Total Offal
Liver	Beef	24.6
	Pork	6.5
Heart	Beef	10.5
	Pork	1.3
Kidney	Beef	4.6
	Pork	1.7
Tongue	Beef	8.6
	Pork	1.1
Sweetbreads	Calf and Beef	2.4
Tripe	Beef	21.3
Brains	Pork	0.6
Contaminated and Condemned		16.8
Total		100.0

4. RESULTS — APPARENT PER-CAPITA DOMESTIC DISAPPEARANCE DATA

The objectives of this chapter are twofold: to summarize major trends in the apparent consumption (disappearance) of various foods by commodity group¹ and to discuss trends pertaining to various nutrients apparently available for consumption.

4.1. Trends in food disappearance

There has been a marked change in the composition of the food basket since 1960, although the consumption of all food, as determined by apparent per-capita domestic disappearance of food in Canada,² has remained relatively stable. Trends in major groups (Figures 4.1 to 4.6) are summarized below.

- Red meat and poultry consumption has increased since 1965, primarily due to increases in beef and chicken consumption.
- Dairy product consumption trended downward over the 1965–76 period. Fluid whole milk, butter, cream, and concentrated whole-milk products were largely responsible for this decline. This downward trend, however, was somewhat offset by the increase in consumption of cheese (Cheddar, process, and specialty).
- Egg consumption increased slightly over the 1966–70 period but has decreased continuously since 1971.
- Since 1965 there has been an increasing trend for fat and oil consumption. There has been a substitution of shortening and shortening oil, margarine, and salad oil for butter.
- Cereal disappearance has remained relatively stable over the 1965–76 period.

- The disappearance of fruits and vegetables increased over the period from 1960 to 1975. Major increases in this group have been for fresh fruit and fruit juices. Consumption of potatoes has fluctuated over the period but a declining trend is apparent.
- The consumption of sugars and syrups fluctuated over the period and no trend was discerned. However, in 1974, there was a significant decline due to sharp increases in the price of granulated and other sugars. Finally, the disappearance of beverages (coffee, tea, and cocoa) has remained relatively stable over the period under study.

4.2. Trends in apparent nutrient availability: disappearance data

For all nutrients considered in this study, results were tabulated and figures were prepared on which the discussion may be based. Tables presented in the appendixes giving yearly values for the 1960–75 period deal with unit value contributions by food groups to each of the 13 nutrients (Tables A.1–A.13, Appendix A); percentage contributions by food groups to each of the 13 nutrients (Tables D.1–D.13, Appendix D); and percentage contributions by nutrients to total food energy (Table F.1, Appendix F). Graphs related to the discussion in this section are also presented in the appendixes and show trends in nutrient availability for consumption (Figures B.1–B.13, Appendix B); and percentage contributions by food groups to each of the 13 nutrients (Figures D.1–D.13, Appendix D). However, for the sake of brevity, discussion will focus on the trends of percentage contributions by food groups to each nutrient in Canada.

4.2.1. Food energy

Over the 16-year period from 1960 to 1975 per-capita total energy available has increased slightly, ranging between a low of 2974 (1961)³ and a high of 3257 (1972) calories per day (Table 4.1).⁴ It is not likely that all of the energy available from the food supply (disappearance) is consumed. No estimates are available for wastage between the point at which the food is purchased and the consumers' dinner plate. The waste factors for high-carbohydrate foods and vegetable oils used in frying (major sources of energy in the diet) are likely to be high as these are relatively inexpensive items in the food basket and probably not highly valued by Canadians, at the current level of consumption, to meet nutritional requirements. The calculated figures, therefore, are used mainly as trend indicators.

While total energy intake has increased slightly, of note is the shift in energy source. The proportion of calories derived from protein has remained relatively stable, between 11.6 and 11.9 percent, while the proportion of calories from fat has steadily increased, and that from carbohydrate has decreased (Table F.1, Appendix F).

Food energy contributions by food groups show only minor changes since 1960. Most of the dietary energy comes from cereals, meat, fats and oils, sugars and syrups, and dairy products. The most noticeable changes since 1960 are a decreased proportion of energy from dairy products, cereals, and sugars and syrups, and an increase from meat and fats and oils (Table 4.2).

Evaluation of the diets from the Nutrition Canada Survey (1970–72),⁵ shows that in general there are few interprovincial differences in calorie intake but that the median intakes of Indians were lower than the corresponding national intakes, and the lowest among the Inuit. The recorded intakes in some groups, particularly those for the elderly (65 years of age and over) and Inuit women would be unlikely to supply adequate amounts of micronutrients. On the national level, the median calorie intakes of children under 10 years appeared to exceed generally accepted requirements, while those of teenage girls, especially 18-year-olds, were below requirements. The calorie intakes of adults (aged 20 to 64 years) did not appear to be excessive although the problem of overweight existed throughout Canada, with few interprovincial or ethnic differences.

4.2.2. Macronutrients

4.2.2.1. Protein

Per-capita protein availability between 1960 and 1975 increased, from 87.0 g (1962) to 94.6 g (1975) per day (Table 4.1). Although the contribution of protein to food energy has remained stable, there have been shifts in the protein availability from the various food groups. Food groups contributing to protein availability are dairy products, meat, and cereals. Over the 1960–75 period, the trend has been to derive a greater proportion of protein from meat and poultry and a smaller proportion from dairy products and eggs. Also of interest is the increased contribution by pulses and nuts. Although it comprises a small percentage of total protein, it increased from 3.9 percent in 1960 to 5.6 percent in 1975, thus increasing somewhat the importance of vegetable-based products as a source of protein (Table 4.3).

The Nutrition Canada Survey results indicate that the protein status of the majority of children, adolescents, and adults was satisfactory. However, both dietary and biochemical evidence suggests that the protein status of the elderly, especially elderly women, was only marginally adequate.

4.2.2.2. Fat

The per-capita availability of fat has been increasing steadily since 1960, with the low for the period occurring in 1961 (130.6 g) and the high in 1972 (152.2 g). This increase can be attributed primarily to the increased apparent consumption of vegetable oil. Also of note is the shift from animal to vegetable sources of dietary fat. Several authors (Ware 1966, Pando 1970, Shute 1973, and Anderson 1977) have discussed the substitution of margarine and shortening oils for butter and lard. Several factors such as price, the increased prevalence of deep-fat frying (for example, in fast-food outlets), and concern about the cholesterol level of saturated animal fats may have contributed to this shift.

The percentage contribution by food groups to total fat has changed slightly since 1960. However, fats and oils, meat, and dairy products continue to be the primary sources of dietary fat. Over the period from 1960 to 1975 the contribution by fats and oils increased from 40.0 to 42.2 percent, while the contributions by meat and dairy products decreased 1.0 percent and 2.6 percent, respectively (Table 4.3). A decrease in meat fat contribution was noted, despite increases in meat consumption, probably due to the trend toward the production of leaner meat.

4.2.2.3. Carbohydrates

The availability of carbohydrates for consumption per capita per day has been relatively steady with a low of 367.7 g (1961) and a high of 391.9 g (1965). Cereals, and sugar and syrups are the primary sources of dietary carbohydrates, accounting for approximately 75 percent of the total. Starting in 1960, there was a declining trend in the proportion of energy derived from carbohydrates and an increasing proportion of energy from carbohydrate sources derived from sugar and syrups. This increasing trend, however, was broken in 1974 when sugar prices averaged 96.2 percent higher than in the previous year. As a result of higher sugar prices, by 1975, Canadians had decreased their yearly consumption of sugar to 39.6 kg per capita, which had been 47.36 kg in 1973. This decrease in consumption was mainly responsible for the decrease in the amount of carbohydrates contributed by sugar and syrups from 37.2 percent in 1973 to 33.1 percent in 1974 and 31.9 percent in 1975.

A recent study of macronutrient intake⁶ comparing four industrial countries (Canada, United States, the United Kingdom, and Sweden) shows similar trends over the past 25 years. These are: (1) no significant change in total energy available; (2) an increasing proportion of total energy derived from fat; (3) no significant changes in the proportion of energy from protein; and (4) a decreasing proportion of energy from carbohydrates, but from among the various forms of carbohydrates an increasing proportion from sugar.

Such dietary trends, in conjunction with other lifestyle trends have concerned nutritionists in recent years, in relation to the so-called “diseases of affluence.” These concerns are brought out in *The Canadian Dietary Recommendations*, published by the federal government and include the recommendations to reduce total fat intake; reduce sugar intake but increase that of carbohydrates from other sources; to increase energy output and avoid obesity.

4.2.3. Minerals

4.2.3.1. Calcium and phosphorus

Calcium availability decreased 4.0 percent during the period from 1960 to 1975, with peak availability in 1966 at 1008.4 mg. This declining trend was noted by Spencer and Feaver [1975]. The availability of phosphorus, however, showed slight year-to-year variations ranging between 1440.7 g (1962) and 1514.8 g (1969). The largest decreases in a single

year for calcium and phosphorus (7.1 and 3.8 percent) were recorded in 1970. This change can be associated with the decline in fluid milk consumption from 130.23 kg to 124.38 kg per capita in the same period.

The contribution by dairy products, the major source of dietary calcium, has declined during the period from 81.3 to 76.4 percent (Table 4.4). Significant contributions to total phosphorus availability are made by dairy products, meat, and cereals. Whereas the contributions by dairy products and cereals to phosphorus have decreased during the period, from 44.5 to 40.3 percent and from 13.2 to 12.6 percent, respectively, the contribution by meat has increased from 14.0 to 16.5 percent.

According to the Nutrition Canada Survey, all groups, except pregnant women and teenage girls, had adequate median intakes of calcium. Teenage boys had the highest median intake of any age group and elderly women had the lowest. In general, males had higher intakes than females. Serum phosphorus levels fell dramatically with increasing age, and there was a wide range of phosphorus levels in each age group.

4.2.3.2. Iron

The overall trend for iron availability has been slightly upward, with a low of 14.4 mg in 1961 and a high of 15.5 mg in 1972.

Breakfast foods, enriched wheat flour, offal, spinach, and lima beans are the major sources of dietary iron. A large share of the iron available for consumption is a result of the enrichment of grain products.

Cereals, meat, and fruit and vegetables are the groups providing the greatest proportion of dietary iron. Their contribution has remained relatively steady during the period (Table 4.4), with the contribution from cereals decreasing slightly (from 34.2 to 32.1 percent) and that from meat increasing slightly (from 22.4 to 25.8 percent).

The Nutrition Canada Survey results indicate that Canadian adolescents and women had median intakes in the marginal range and infants and children had barely adequate median intakes of iron, whereas only men had median intakes well in excess of the standard adequacy. There was a wide variation in values showing considerable daily differences in the amount of iron consumed. The dietary data for fruit, in contrast, showed that the median intakes of iron for most groups were higher than in the national population, although some groups such as adolescent girls still had intakes in the marginal range.

4.2.4. Vitamins

The relatively high level of many vitamins (such as vitamins A, C, and D, riboflavin, thiamine, and niacin) in the Canadian diet is primarily a result of the enrichment of food.

4.2.4.1. Vitamin A

During the 1960–75 period, the availability of vitamin A has shown a downward trend with a high of 1160.0 RE in 1960 and a low of 1064.6 RE in 1968. This decrease represents one portion of the downward trend which began in 1949, as noted by Shute [1973]. Vitamin A contributions by meat and eggs have decreased since 1960, while those by dairy products and fats and oils have remained relatively constant (Table 4.5). Without the mandatory enrichment of margarine, the decrease in vitamin A available for consumption would have been significant.

The Nutrition Canada Survey indicates that although the dietary data concerning vitamin A were singularly difficult to interpret, the results of the dietary recalls of many individuals were compatible with previous observations that some Canadians' livers are in a poor state. Most groups had adequate median intakes. Females, especially the middle-aged and elderly, usually had the lowest intakes, with median values generally in or near the marginal range. Dietary data indicate that many Indians had intakes that were only marginally adequate. The lowest dietary intakes were recorded for the Inuit.

4.2.4.2. Thiamine, riboflavin, and niacin

Cereals are the primary source of thiamine, riboflavin, and niacin. High contribution levels are maintained by the provision for enrichment of breakfast cereals and the mandatory enrichment of white flour under the Food and Drugs Act and Regulations. The regulations specify the amounts and kinds of nutrients that either must be or may be added to specific foods in order to replace the nutrients lost during processing. For example, the bran layers of whole wheat are a significant source of B-vitamins and iron. Since white flour has lost its bran layer, the regulation provides for the addition of the lost nutrients to the level found in whole wheat flour. The enrichment of breakfast cereals is still optional, but that of white flour was made mandatory in August 1976. Before 1976 the regulations specified minimum amounts of nutrients that had to be in these products in order for them to be labeled enriched. It is estimated that due to the competitive nature of the industry, 95 percent of the breakfast cereals and 70 percent of the flour were enriched during the 1960–75 period.

The availabilities of riboflavin and niacin for consumption show increasing trends for the period, while the availability of thiamine has been decreasing. The contribution by dairy products to total thiamine, riboflavin, and niacin availability decreased over the period from 1960 to 1975, as did the contribution by cereals to thiamine and niacin availability. The contribution by meat to riboflavin and niacin increased slightly over the 16-year period studied (Table 4.6).

The Nutrition Canada Survey dietary assessments indicated that the diets of most Canadians contained adequate amounts of thiamine and riboflavin and an abundance of niacin. The diets of Inuit provided even larger quantities of these vitamins than those of the Indian and other population groups. Groups consuming relatively small amounts of food (for example, middle-aged and elderly women) had the least satisfactory intakes of these vitamins.

4.2.4.3. Ascorbic acid

The availability of ascorbic acid for consumption decreased from 1960 to 1965, but increased for the years 1966 to 1975. According to Shute [1973], similar fluctuations have occurred since 1949.

Most of the dietary ascorbic acid available is derived from the fruit and vegetable groups. Over the period from 1960 to 1975, the contribution by vegetables decreased, while that by fruit increased.

The percentage contributions by potatoes, and tomatoes and tomato products to total ascorbic acid availability have decreased slightly during the period (from 33.5 to 28.4 percent for potatoes and from 11.9 to 10.7 percent for tomatoes and tomato products) and the contribution by citrus fruit increased from 19.4 to 21.5 percent (Table 4.6).

Nutrition Canada Survey dietary data showed that the median vitamin C intakes of all groups were adequate. Indians' median intakes were also satisfactory, but below national ones. Lowest median intakes were observed in the Inuit, where most were below the adequate standard. The elderly had the lowest levels of serum vitamin C, and nationally, the greatest percentage of individuals at high risk. Generally, middle-aged and elderly women had higher serum vitamin C levels, at the national level, than men in comparable age groups, although their median intakes were similar.

4.2.4.4. Total folate

Total folate availability for consumption is the cumulative sum of small quantities available from a wide variety of foods. The availability of total folate remained fairly stable for the period from 1960 to 1973, with a small increase in the subsequent two years.

4.3. Comparison of results obtained from apparent per-capita domestic disappearance data and the Nutrition Canada Survey

Through a comparison of nutrient availability for consumption between apparent per-capita domestic disappearance data and the results of the Nutrition Canada Survey, an approximation of per-capita nutrient loss from the retail level to actual consumption may be made.

For the Nutrition Canada Survey, nutrient values were applied to quantities of specific food items consumed at home and away from home during a 24-hour period prior to the interview, and the frequency with which certain foods were consumed during the previous month was ascertained. The intake of vitamin and mineral supplements was also determined; their contribution to total nutrient intake has, however, been excluded from the calculations. In this way, an estimate of the nutritive value of food consumed by a representative sample of the population could be established. An estimate of the average daily nutrient intake for the Canadian population was the calculated average for nutrient intake weighted for age and sex stratifications (Table 4.7).⁷

Nutrients available for consumption as calculated from domestic disappearance data, and nutrients

actually consumed as calculated from Nutrition Canada Survey data, are presented in Table 4.8.

Significant differences noted in food energy and the macronutrients protein, fat, and carbohydrates are the result of nutrient losses along the food chain from producer to consumer. This would include factors such as trimming, processing, food loss due to spoilage, table waste, etc.

¹ See also D.T. Karamchandani's "Trends in Food Consumption, Prices and Expenditures, 1961-73," pp. 17-26.

² The *Apparent Per Capita Domestic Disappearance of Food in Canada* figures are estimates of the amount of food available on the average to the total population, and therefore do not represent the total food supplies actually consumed by individuals or specific groups (see Section 3). These data do, however, provide an indicator of what is consumed, and further discussion will be based on this premise.

³ The figure in parentheses is the year for which the available nutrient is calculated.

⁴ Similar observation of food energy availability for consumption were reported by both Shute [1973] and Anderson [1977]. In fact Anderson and Sinclair [1969] reported relatively stable food energy availability since 1935.

⁵ Health and Welfare Canada. *Nutrition Canada: The Ontario Survey Report*.

⁶ Health and Welfare Canada. *Nutrition and Health, Report by Policy Research and Strategic Planning*.

⁷ Nutrient intake, as reported in the Nutrition Canada Survey, by age and sex stratifications, was multiplied by the June 1, 1972 population for each stratification. The products were summed, and then divided by the total Canadian population. These results were to give the per-capita nutrient intake for an average Canadian.

TABLE 4.1. NUTRIENTS AVAILABLE FOR TOTAL CONSUMPTION (HOME AND AWAY FROM HOME) PER CAPITA PER DAY, 1960-75: DISAPPEARANCE DATA

Year	Food Energy cal	Food Energy kJ	Protein g	Fat g	Carbo- hydrates g	Calcium mg	Phosphorus mg	Iron mg	Vitamin A RE	Thiamine mg	Ribo- flavin mg	Niacin NE	Ascorbic Acid mg	Total Folate μ
1960	3 028.76	12 521	89.00	132.37	376.73	1 005.40	1 472.67	14.61	1 159.96	1.84	2.37	38.33	100.63	199.03
1961 ^a	2 974.01	12 295	88.18	130.64	367.65	1 008.09	1 464.50	14.40	1 111.28	1.80	2.37	37.82	97.92	194.85
1962	3 007.46	12 433	87.01	132.66	373.17	977.37	1 440.66	14.47	1 137.21	1.79	2.31	37.83	97.82	194.59
1963	3 046.16	12 593	89.39	134.49	376.04	994.21	1 472.85	14.79	1 104.64	1.81	2.36	38.38	93.13	192.96
1964	3 065.93	12 675	89.37	136.70	376.49	992.25	1 475.19	14.77	1 099.31	1.80	2.33	38.43	93.76	193.33
1965	3 129.53	12 937	91.45	135.88	391.87	986.83	1 485.34	15.11	1 075.44	1.83	2.36	39.24	90.90	195.70
1966	3 134.54	12 958	90.53	140.99	382.91	1 000.85	1 487.17	14.95	1 082.82	1.79	2.36	38.68	91.40	195.19
1967	3 170.40	13 106	91.56	144.39	383.29	979.45	1 493.61	15.13	1 099.18	1.85	2.34	39.79	101.45	196.66
1968	3 166.65	13 091	90.85	145.45	380.62	979.43	1 477.61	14.85	1 064.61	1.80	2.33	39.29	95.60	192.39
1969	3 194.92	13 208	93.12	146.09	383.65	1 008.44	1 514.79	15.00	1 087.11	1.83	2.39	40.11	98.59	194.76
1970	3 186.12	13 171	91.18	147.10	381.23	936.90	1 457.23	15.11	1 088.05	1.83	2.30	39.68	98.80	193.15
1971	3 217.40	13 301	91.15	150.96	380.89	925.55	1 468.64	15.34	1 123.06	1.85	2.27	39.84	100.24	197.31
1972	3 256.69	13 463	92.53	152.22	386.38	933.17	1 484.75	15.51	1 097.17	1.84	2.29	40.27	98.63	198.74
1973	3 213.99	13 287	91.47	146.60	389.81	942.00	1 469.68	15.15	1 077.63	1.80	2.27	39.99	101.22	193.91
1974	3 195.63	13 211	93.95	149.62	375.42	985.72	1 513.98	15.28	1 137.73	1.88	2.34	40.69	104.56	202.46
1975	3 168.22	13 097	94.58	147.20	373.39	965.47	1 510.44	15.31	1 128.81	1.89	2.33	41.65	109.94	204.40

TABLE 4.2. COMPARISON OF PERCENTAGE CONTRIBUTIONS TO FOOD ENERGY BY MAJOR FOOD GROUPS IN CANADA

Food Group	1960	1975	Mean ^a
	percent		
Cereals	23.0	22.2	22.0
Meat	15.9	16.7	16.6
Fats and Oils ^b	15.5	17.4	16.6
Sugars and Syrups	15.9	14.6	16.2
Dairy Products	13.3	11.6	12.2

^a Sum of the percentage contribution for each of the years 1960 to 1975 inclusive divided by 16.

^b Includes butter.

TABLE 4.3. COMPARISON OF PERCENTAGE CONTRIBUTIONS TO PROTEIN, FAT, AND CARBOHYDRATES BY MAJOR FOOD GROUPS IN CANADA

Nutrient and Food Group	1960	1975	Mean
	percent		
Protein			
Meat	24.4	27.3	25.8
Dairy Products	26.0	22.9	24.7
Cereal	22.2	21.0	21.3
Fat			
Fats and Oils ^a	40.0	42.3	41.3
Meat	32.5	31.5	32.7
Dairy Products	15.7	13.1	13.9
Carbohydrates			
Cereals	38.7	39.7	37.9
Sugars and Syrups	33.0	32.0	34.5

^a Includes butter.

TABLE 4.4. COMPARISON OF PERCENTAGE CONTRIBUTIONS TO CALCIUM, PHOSPHORUS, AND IRON BY MAJOR FOOD GROUPS IN CANADA

Nutrient and Food Group	1960	1975	Mean
	percent		
Calcium			
Dairy Products	81.3	76.4	80.2
Phosphorus			
Dairy Products	44.4	40.3	43.0
Meat	14.0	16.5	15.2
Cereals	13.2	12.6	12.8
Iron			
Cereals	34.2	32.1	32.6
Meat	22.4	25.8	23.7
Fruit and Vegetables ^a	19.5	19.6	18.8

^a Includes tomatoes and tomato products, citrus and other fruit, other vegetables, and potatoes.

TABLE 4.5. COMPARISON OF PERCENTAGE CONTRIBUTIONS TO VITAMIN A BY MAJOR FOOD GROUPS IN CANADA

Food Group	1960	1975	Mean
	percent		
Fats and Oils ^a	24.3	23.5	25.3
Other Vegetables ^b	25.8	28.1	24.4
Dairy Products	16.4	15.9	16.4
Meat	19.1	15.1	16.8

^a Includes butter.^b Includes tomatoes and tomato products, and excludes potatoes.**TABLE 4.6. COMPARISON OF PERCENTAGE CONTRIBUTIONS TO THIAMINE, RIBOFLAVIN, AND ASCORBIC ACID BY MAJOR FOOD GROUPS IN CANADA**

Nutrient and Food Group	1960	1975	Mean
	percent		
Thiamine			
Cereals	38.4	36.8	37.7
Meat	20.7	19.7	21.2
Dairy Products	13.0	11.1	12.5
Riboflavin			
Dairy Products	45.7	41.7	44.5
Cereals	23.4	23.3	23.2
Meat	12.2	12.9	12.5
Ascorbic Acid			
Potatoes	33.5	28.4	31.9
Citrus Fruit	19.4	21.5	18.9
Other Vegetables ^a	28.6	32.8	30.4
Other Fruit	9.4	11.3	10.7

^a Includes tomatoes and tomato products.**TABLE 4.7. DAILY PER-CAPITA NUTRIENT INTAKE AND POPULATION BY AGE AND SEX STRATIFICATION FOR CANADA**

Nutrient	Children		Children (5 – 11)	Adults (12 – 19)		Adults (20 – 39)		Adults (40 – 64)		Adults (65+)		All Individuals ^a
	Infants (1 – 4)			Male	Female	Male	Female	Male	Female	Male	Female	
Food Energy (cal)	926.00	1 666.00	2 300.00	3 251.00	2 243.00	3 374.00	2 001.00	2 671.00	1 726.00	2 056.00	1 530.00	2 353.00
Food Energy (kJ)	3 828.00	6 887.00	9 508.00	13 440.00	9 273.00	13 948.00	8 272.00	11 042.00	9 135.00	8 500.00	6 325.00	9 727.00
Protein (g)	39.00	62.00	77.00	111.00	76.00	119.00	72.00	94.00	63.00	72.00	54.00	83.00
Fat (g)	31.00	70.00	96.00	147.00	100.00	154.00	89.00	118.00	75.00	89.00	63.00	103.00
Carbohydrates (g)	124.00	203.00	290.00	378.00	269.00	351.00	227.00	286.00	197.00	235.00	187.00	268.00
Calcium (mg)	1 131.00	1 082.00	1 115.00	1 337.00	967.00	1 081.00	709.00	883.00	613.00	709.00	619.00	930.00
Iron (mg)	27.00	10.00	12.00	17.00	11.00	18.00	12.00	16.00	11.00	13.00	10.00	14.00
Vitamin A (RE)	698.00	879.00	1 114.00	1 455.00	1 036.00	1 551.00	1 292.00	1 332.00	1 031.00	1 113.00	1 008.00	1 213.00
Thiamine (mg)	1.03	0.93	1.18	1.65	1.07	1.57	1.02	1.32	0.90	1.08	0.85	1.19
Riboflavin (mg)	2.12	2.11	2.33	2.96	1.90	2.59	1.70	2.09	1.49	1.77	1.47	2.09
Niacin (NE)	16.00	22.00	28.00	43.00	27.00	48.00	28.00	37.00	25.00	28.00	21.00	32.00
Ascorbic Acid (mg)	54.00	84.00	99.00	101.00	92.00	118.00	89.00	101.00	106.00	85.00	87.00	98.00
Total Folate (μ)	65.00	122.00	160.00	210.00	153.00	221.00	146.00	183.00	148.00	151.00	130.00	166.00
Population ('000)	347.80	1 436.60	3 113.00	1 811.70	1 743.50	3 119.60	3 072.70	2 666.00	2 701.80	2 797.00	2 991.40	21 001.00

Sources: Health and Welfare Canada, *Nutrition Canada Food Consumption Patterns Report*, and Statistics Canada, *Intercensal Estimates of the Population by Sex and Age, Canada and the Provinces*.

^a The nutrient intake, excluding vitamin and mineral supplements, as determined by the Nutrition Canada Survey, has been weighted over the June 1, 1972 population census by age and sex group.

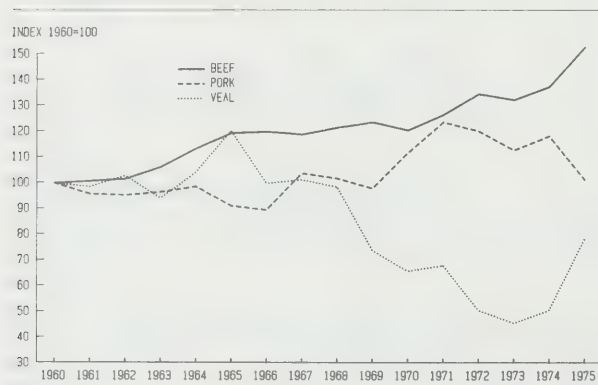
TABLE 4.8. COMPARISON OF NUTRIENT INTAKES, PER CAPITA PER DAY, AS DETERMINED FROM DOMESTIC DISAPPEARANCE DATA AND DATA FROM THE NUTRITION CANADA SURVEY, 1970-72^a

Nutrient	Apparent Per Capita Domestic Disappearance Data (1970-72)	Nutrition Canada Survey (1970-72)
Food Energy (cal)	3 220.00	2 353.00
Food Energy (kJ)	13 472.00	9 845.00
Protein (g)	92.00 (11%)	83.00 (14%)
Fats (g)	150.00 (42%)	103.00 (40%)
Carbohydrates (g)	383.00 (47%)	268.00 (46%)
Calcium (mg)	932.00	930.00
Iron (mg)	15.00	14.00
Vitamin A (RE)	1 103.00	1 213.00
Thiamine (mg)	1.84	1.19
Riboflavin (mg)	2.29	2.09
Niacin (NE)	40.00	32.00
Ascorbic Acid (mg)	99.00	98.00
Total Folate (μ)	196.00	166.00

^a Figures in parentheses give the percentage contribution to total food energy intake.

Sources: See Tables 4.1 and 4.8.

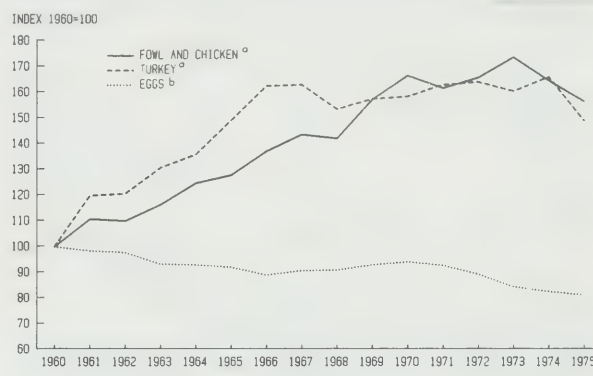
FIGURE 4.1. PER-CAPITA DOMESTIC DISAPPEARANCE:^a BEEF, PORK, AND VEAL (1960=100)



^a Cold dressed carcass weight.

Source: Statistics Canada, *Apparent Per-Capita Domestic Disappearance of Food in Canada*, Catalogue No. 32-226.

FIGURE 4.2. PER-CAPITA DOMESTIC DISAPPEARANCE: FOWL AND CHICKEN, TURKEY, AND EGGS (1960=100)

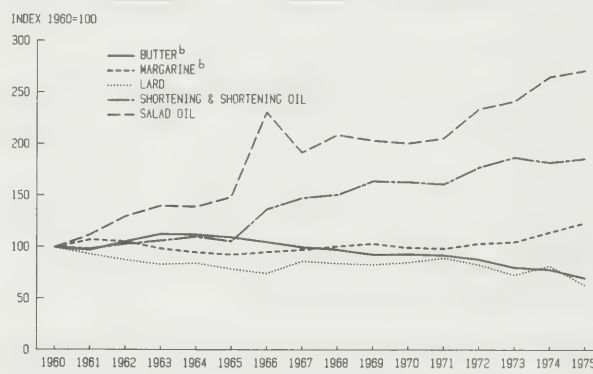


^a Eviscerated weight.

^b Fresh egg equivalent.

Source: See Figure 4.1.

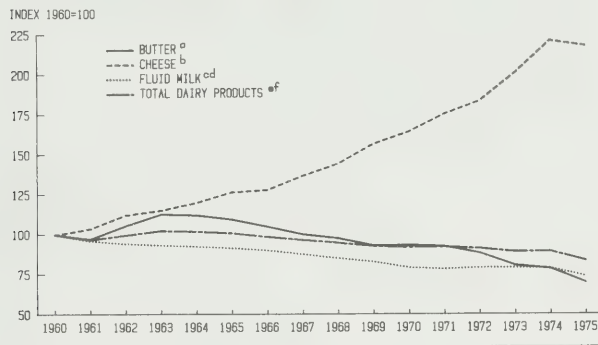
FIGURE 4.3. PER-CAPITA DOMESTIC DISAPPEARANCE: BUTTER, MARGARINE, LARD, SHORTENING AND SHORTENING OIL, AND SALAD OIL (1960=100)



^a Retail weight.

^b Includes creamery, farm, and whey butter.

Source: See Figure 4.1.

FIGURE 4.4. PER-CAPITA DOMESTIC DISAPPEARANCE: BUTTER, CHEESE, FLUID MILK, AND ALL DAIRY PRODUCTS (1960=100)

^a Includes creamery, farm, and whey butter.

^b Includes Cheddar, processed, and other cheese.

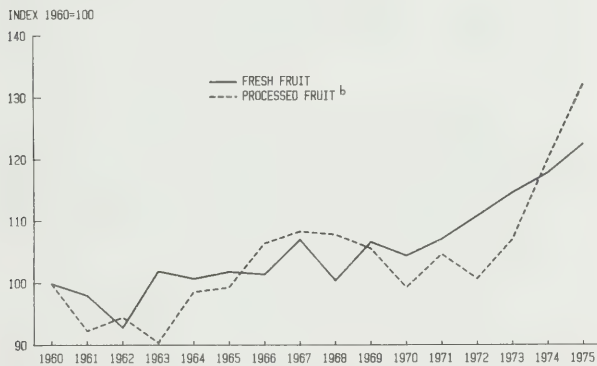
^c Includes fluid sales, as well as milk and cream consumed in the farm home.

^d Newfoundland excluded.

^e Newfoundland excluded from fluid milk, but included for all other products.

^f In terms of milk.

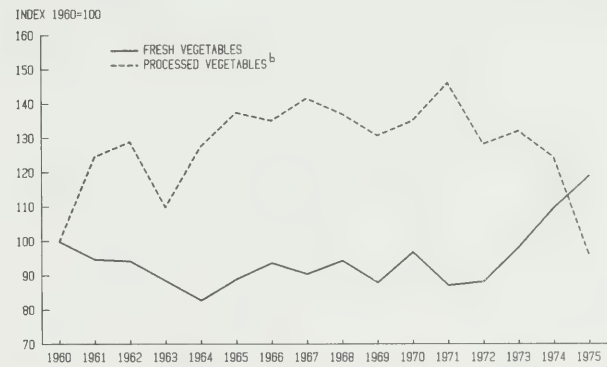
Source: See Figure 4.1.

FIGURE 4.5. PER-CAPITA DOMESTIC DISAPPEARANCE:^a FRESH AND PROCESSED FRUIT (1960=100)

^a Excluding tomatoes.

^b Fresh equivalent.

Source: See Figure 4.1.

FIGURE 4.6. PER-CAPITA DOMESTIC DISAPPEARANCE:^a FRESH AND PROCESSED VEGETABLES (1960=100)

^a Excluding tomatoes, potatoes, and mushrooms.

^b Fresh equivalent.

Source: See Figure 4.1.

5. RESULTS — FAMILY FOOD EXPENDITURE SURVEY DATA

An alternative means of determining the availability of food for purchase by the Canadian population is through the use of nationwide family food expenditure surveys. Sub-surveys have been undertaken by Statistics Canada since 1949, although their scope and frequency have varied considerably. The discussion in this section is based on data derived from the 1969 Family Food Expenditure Survey and the 1974 Urban Family Food Expenditure Survey.¹

Numerous tables and graphs of statistical survey results were prepared and are presented in the appendixes. Tables giving 1969 and 1974 values for all families and for families and unattached individuals in the five income quintile groups are the unit values of major food-group contributions from food consumed at home ascribed to each of the 13 major nutrients (Tables A.14–A.27, Appendix A), and percentage contributions by major food groups to each of the nutrients for food prepared at home (Tables E.1–E.13, Appendix E). Related graphs are also presented in the appendixes and show changes in nutrient availability from food consumed at home (Figures C.1–C.13 Appendix C), and percentage contributions by major food groups to each of the nutrients discussed (Figures E.1–E.13, Appendix E). For the sake of brevity, discussion focuses on changes in the expenditure shares for food prepared at home and food consumed away from home and on nutrient availability from food consumed at home in 1974, for all families and for families and unattached individuals in the first and fifth income quintile groups.²

5.1. Weekly per-capita food expenditure shares by income quintile, 1969 and 1974

Between 1969 and 1974 the average per-capita weekly expenditure for food prepared at home fell from 78.0 to 75.0 percent of total food expenditure, while expenditure for food consumed away from home increased from 22.0 to 25.0 percent during the same period (Table 5.1).

Families and unattached individuals in the first quintile decreased their share of total food expenditure for food consumed away from home (from 21.8 to 19.5 percent) while increasing their expenditure for food prepared at home (from 78.2 to 80.5 percent). Families and unattached individuals in the fifth quintile, however, continued to increase their expenditure on food consumed away from home (from 27.8 to 30.7 percent) while decreasing the expenditure for food prepared at home (from 72.2 to 69.3 percent).

Of note, however, is the significantly greater share of total food expenditures for food consumed away from home for participants in the fifth quintile than those in the first quintile in both 1969 (27.8 as compared to 21.8 percent) and 1974 (30.7 as compared to 19.5 percent). This distribution results in a potentially lower proportion of total nutrient intake from food prepared at home for fifth-quintile respondents than those in the first income quintile. The reverse may hold for the share of nutrient intake from food consumed away from home.

5.2. Nutrient availability from food prepared at home, 1974

The following discussion will focus on the 1974 per-capita daily intake of food energy, macronutrients (protein, fat, and carbohydrates), vitamins (vitamin A, ascorbic acid, total folate, and niacin), and minerals (calcium, phosphorus, and iron), from food purchased for home consumption by families and unattached individuals in the first and fifth income quintiles as compared with the average for all families. Changes in the purchasing patterns between 1969 and 1974 of various foods consumed that are of significance to specific nutrients will also be discussed.

5.2.1. Food energy

In 1974, first-quintile respondents derived a greater amount of energy from food consumed at home (2278.4 cal or 9419.0 kJ) than all families (2156.6 cal or 8915.0 kJ (Table 5.2)), mainly due to relatively more purchases of bakery, cereal, and dairy products, miscellaneous groceries, and fats and oils. The fifth-quintile respondents, on the other hand, derived less food energy from food prepared at home (2108.7 cal or 8717 kJ) than the average, mainly due to lesser purchases of bakery and cereal products, miscellaneous groceries, and fats and oils (Tables A.14–A.15, Appendix A).

5.2.2. Macronutrients

Respondents in both the first and fifth quintiles had protein intakes above the intake level for all families of 69.0 g (71.4 and 69.5 g, respectively). Although families and unattached individuals in the first quintile decreased their homogenized milk and egg intake from the 1969 level, increases in the consumption of fish, low-fat milk, cheese, chicken, and pork contributed to protein intake in 1974. Families and unattached individuals in the fifth quintile decreased their homogenized milk, poultry, and fish intakes in 1974, while significantly increasing those of eggs and cheese.

Total fat intake for the first-quintile respondents (107.0 g) was above that of all families (104.9 g) in 1974, perhaps part of the trend towards a greater consumption of visible fats, especially margarine, and cooking oils. The increased purchases of cheese and pork served to supplement the higher fat intake. On the other hand, the shift from homogenized milk (3.3 percent fat) to low-fat milk (2.0 percent fat), and the moderate decrease in butter consumption served to moderate the overall increases in fat consumption.

Respondents in the fifth quintile showed a fat intake equal to that for all families (104.9 g), despite significant increases in oil and margarine intake, as butter and homogenized milk consumption fell. Families and unattached individuals in this group failed to substitute low-fat milk for homogenized milk, and thus minimize the effect on fat intake, as did those in other income groups.

Finally, respondents in the first quintile showed a carbohydrate intake significantly higher than that of all families (262.6 g compared to 238.7 g). Participants in the fifth quintile had a lower carbohydrate intake than all families (226.1 g). Calculations based on the 1974 Family Food Expenditure Survey data show that family expenditure elasticities for cereal products are -0.1558 for all families, -0.0765 for families with incomes under \$6,000 and -0.2437 for families with incomes over \$15,000.³

Notable for families and unattached individuals in both the first and fifth quintiles is the shift from bakery to cereal products. Bread consumption fell, while the purchase of both breakfast cereals and flour showed increased popularity. Within cereal products, a shift toward greater consumption of prepared breakfast cereals, probably due to their convenience, is evident. The introduction of rice in the 1974 survey also served to supplement the carbohydrate contribution by cereal products. However, a significantly higher intake of sugar by first-quintile respondents is a primary factor in the high carbohydrate consumption by this group, as compared to that of other income quintile groups.

5.2.3. Minerals

First-quintile respondents showed levels of calcium and phosphorus consumption above the averages for all families of 768.5 and 1088.4 mg (786.5 and 1119.3 mg). While higher fluid milk (homogenized and low-fat) and cheese consumption levels are primarily responsible for both the higher calcium and phosphorus levels, increases in the intake of cereals, flour, and pork served to augment the higher phosphorus availability for this group.

Fifth-quintile respondents, on the other hand, had a calcium intake below that for all families (758.8 mg) since they failed to replace their lower purchase level of homogenized milk with a higher one of low-fat milk, as those in the first quintile did. Higher levels of cheese and pork consumption in 1974 account for an average fifth-quintile phosphorus intake (1092.8 mg) above that of all families.

Finally, in 1974, respondents in the first quintile had an iron intake above the average for all families of 12.8 mg (13.1 mg), due to higher levels of consumption of breakfast cereal, flour, and pork. Participants in the fifth quintile had an iron intake equal to that for all families, mainly due to increased egg consumption by this group in 1974.

5.2.4. Vitamins

In 1974, first-quintile respondents consumed more vitamin A (1177.2 RE) than all families (1010.6 RE), largely due to an increased consumption of low-fat milk, margarine, and cheese, while decreases in butter and liver intake were moderate. Fifth-quintile respondents, however, had a vitamin A intake below that of all families (985.3 RE), as significant decreases in the consumption of homogenized milk, butter, and liver outweighed increases in cheese and margarine consumption.

Families and unattached individuals in both the first and fifth quintiles consumed the same amount of thiamine and riboflavin as all families (1.3 and 1.7 mg) in 1974. Both income groups took in more niacin than all families, 29.1 Niacin Equivalents (30.5 and 29.5 NE), due to an increased consumption of pork and dried vegetables.

In 1974, families and unattached individuals in both the first and fifth quintiles consumed 84.7 mg of ascorbic acid per day, a level above that of all families (80.1 mg). Increases in the potato purchases by low-income families and those of frozen orange juice by high-income families served to moderate the overall decrease in ascorbic acid intakes from their 1969 levels.

In 1974, first- and fifth-quintile respondents had total folate intakes above the all-family average of

165.6 μ (174.7 and 171.2 μ , respectively). The higher-than-average intake of total folate by these groups is likely the result of an accumulation of slightly higher levels from many foods, as this nutrient is widely dispersed in food.

5.3. Comparison of domestic disappearance and Family Food Expenditure Survey data results

A comparison of the availability of nutrients, as calculated from apparent food disappearance and family food expenditure survey data, is not feasible. The omission of all nutrients derived from food consumed away from home, as well as the procedural differences noted in Section 3.1., result in significantly lower levels of nutrients available for consumption as calculated from survey data, than from per-capita domestic disappearance data. As expenditures for food consumed away from home increased significantly between 1969 and 1974, this factor must be taken into account when discussing changes in nutrient availability between the two years. The inclusion of nutrient values for food consumed away from home, however, is not possible at the present time, as quantities of purchased meal components are not reported.

¹ See also D.T. Karamchandani's "Changes in Food Expenditure Patterns, 1969-1974."

² Participants in the surveys were asked to state their incomes. The sample was then divided into five groups (quintiles), each representing an income category. The first quintile is the lowest-income category and the fifth is the highest. An average of all income groups is reported for all families.

³ Z.A. Hassan, and S.R. Johnson, *Urban Food Consumption Patterns in Canada*.

TABLE 5.1. WEEKLY FOOD EXPENDITURE SHARES BY INCOME QUINTILE, 1969 AND 1974

Item	All Families		1st Quintile		5th Quintile	
	1969	1974	1969	1974	1969	1974
	percent					
All Food	100.0	100.0	100.0	100.0	100.0	100.0
Food Prepared at Home	78.0	75.0	78.2	80.5	72.2	69.3
Food Consumed Away from Home	22.0	25.0	21.8	19.5	27.8	30.7

TABLE 5.2. NUTRIENTS AVAILABLE FOR HOME CONSUMPTION PER CAPITA PER DAY, 1969 AND 1974: FOOD SURVEY DATA

Group	Food Energy		Protein	Fat	Carbo- hydrates	Calcium	Phosphorus	Iron	Vitamin A	Thiamine	Ribo- flavin	Niacin	Ascorbic Acid	Total Folate
	cal	kJ	g	g	g	mg	mg	mg	RE	mg	mg	NE	mg	μ
1969 All Families	2220.6	9180.0	71.1	106.7	249.4	827.1	1141.0	13.1	1077.4	1.3	1.7	30.0	85.6	173.3
1st Quintile	2179.1	9008.0	68.3	103.3	249.8	795.8	1095.1	12.8	1132.3	1.3	1.7	29.2	87.6	173.0
2nd Quintile	2188.0	9045.0	69.0	104.8	247.6	789.0	1098.6	13.0	1095.5	1.3	1.7	29.3	82.7	168.6
3rd Quintile	2314.0	9566.0	74.1	110.5	260.8	867.5	1190.5	13.7	1089.4	1.3	1.8	31.0	80.7	178.1
4th Quintile	2296.8	9495.0	73.6	110.8	256.7	849.0	1168.9	13.4	1013.5	1.3	1.8	31.0	85.4	175.6
5th Quintile	2134.2	8823.0	69.7	104.1	234.9	825.5	1134.5	12.6	1078.3	1.3	1.7	29.5	91.4	172.3
1974 All Families	2156.6	8915.0	69.0	104.9	238.7	768.5	1088.4	12.8	1010.6	1.3	1.7	29.1	80.1	165.6
1st Quintile	2278.4	9419.0	71.4	107.0	262.6	786.5	1119.3	13.1	1177.2	1.3	1.7	30.5	84.7	174.7
2nd Quintile	2165.6	8953.0	67.1	103.5	246.3	748.6	1054.9	12.9	1072.0	1.3	1.7	28.5	82.0	165.8
3rd Quintile	2110.7	8726.0	66.7	102.5	234.9	759.4	1056.9	12.3	964.7	1.2	1.7	28.1	73.3	156.9
4th Quintile	2200.2	9096.0	70.1	107.8	242.0	790.2	1116.3	13.0	970.9	1.3	1.7	29.3	78.8	164.5
5th Quintile	2108.7	8717.0	69.5	104.9	226.1	758.8	1092.8	12.8	985.3	1.3	1.7	29.5	84.7	171.2

6. LIMITATIONS

During the course of the study, it was recognized that food consumption data, as such, do not exist, and that some of the existing data on the nutrient composition of food were incomplete. It is believed, however, that the results are the most accurate that can be drawn under the circumstances and should be used as an approximation which will need to be revised from time to time as further information accumulates. In this section we have outlined the current situation with respect to data availability, the shortcomings of the data for application to the study, recommendations for modification, and expansion of the data base, as well as the accuracy in results that can be expected from such action.

6.1. Domestic disappearance data

6.1.1. Time lag in balance-sheet reporting

The domestic disappearance data are obtained as a residual in the preparation of annual balance sheets, which show the supply and disposition of each food item. To obtain gross supply, imports and beginning stocks are added to production estimates. This figure minus exports and ending stocks gives net supply. The approximate amount of food available for human consumption is found by subtracting seed requirements, manufacturing use, and livestock feed where applicable from net food supply.

The data for the components of the food balance sheets are mainly derived from farm surveys and reports by firms engaged in producing and marketing in the food industry. Due to the complex organizations of the data sources there is a time lag in the reporting of information. This means that balance sheets, even in preliminary form, are not available for at least a year and are not complete for

another year or two. A further lag exists between the time when the need for policy change from the results of nutrient availability studies is recognized and the time when a benefit is derived from policy action. Thus, the total time lag between the occurrence of a change in nutrient availability and the desired correction may be several years.

The present lag in balance-sheet reporting has serious implications for the timeliness of policy actions. Changes in consumption patterns during the two to three years prior to publication cannot be included and policy decisions must be based on long-term trends in nutrient availability. An improvement might occur if manufacturing industries and farmers were to provide more timely information through better cooperation than exists at present between the various government departments and the private sector.

6.1.2. Food not available for human consumption

With the exception of estimates for meat and poultry, which are calculated on a cold dressed carcass and eviscerated-weight basis, the per-capita estimates of domestic food disappearance are calculated on a retail or product weight basis. The waste factors used for specific commodities except meat account for waste up to the retail level, but do not allow for losses in stores, households, private institutions, or restaurants. Per-capita values for meat include features such as bone-in and fat weight, a significant proportion of which is trimmed off before meat is sold at the retail counter. In this study, an adjustment factor has been applied to carcass weight to account for bone and fat removed.

Disappearance data for offal also include those for offal not available for human consumption, such as tankage,¹ and offal used in the manufacture of pet food, thus overstating apparent per-capita consumption figures. In this study, a conversion factor for offal disappearance was arrived at after consultation with representatives of several meat-packing companies. This factor was applied to the entire time series, assuming a constant ratio of food for human consumption to food for other uses. It is suggested that the *Apparent Per Capita Domestic Disappearance* figures include only offal for human consumption. Such information may be obtained from shipment data of meat packing plants.

6.2. Family Food Expenditure Survey data

6.2.1. Lack of data for food consumed away from home

Survey data were collected by using a diary in which respondents recorded, by item, for two consecutive weeks, the expenditure and quantity of food purchased for household use, and the expenditure on meals and snacks in eating places.

Purchases of meals and snacks in eating places were recorded as meal and snack types only, i.e., breakfasts, lunches, dinners, snacks, soft drinks, other non-alcoholic beverages, and chocolate bars. Representative nutrient values for these foods were not available. Using survey data only, it was, therefore, not possible to account for nutrients available from food consumed in restaurants and cafeterias. The implication of such an omission was, however, recognized. Expenditure on food and beverages in eating places as a percentage of total food expenditure increased from 22.0 percent in 1969 to 25.1 percent in 1974 with a corresponding decrease in the expenditure proportion on food prepared at home. A study of changes in nutrient availability based on the data for food prepared at home alone, without taking into account the nutrient contribution by food consumed away from home, would give the false impression of a decreasing intake of many nutrients, for which disappearance data showed an increase. Therefore, major government policies should not be based on the data from the surveys used in this study.

6.2.2. Lack of data on processed foods

Consumers are shifting toward greater consumption of processed foods, as rapid technological developments in food processing (cooking, freezing, canning, dehydrating, and changing the physical characteristics of raw foods) are increasing convenience. The benefit of time and energy conserved through using processed foods perhaps outweighs the generally increased price and potential differences in flavor or other characteristics. Processing procedures used on some foods, on the other hand, may be considered to enhance the palatability and appearance of some raw food commodities. The trend toward an increased use of processed foods is evident from consumer survey data and industry data. These trends have important implications, in research studies, for users of the data obtained from expenditure surveys and from food balance sheets.

In recent years, Statistics Canada has expanded the food disappearance data to include pasta, peanut butter, pickles, and sauces. This list is by no means representative of the foods purchased in a processed form by the consumer. The raw foods used in their manufacture, however, are reflected in disappearance data, but the latter do not account for nutrients lost in processing. Although it is desirable that consumption data be available for a greater number of processed foods and that balance sheets for raw commodities be modified to show utilization in food industry, the data required for such calculations are not available.

6.3. Nutrient values used in Canadian nutrition studies

6.3.1. Current nutrient values

Nutrient values for use in Canadian nutrition studies are as limited today as they have been in the past. Historically, nutrient values used in Canadian studies (Sinclair 1957, Shute 1973, and Anderson 1977) have been primarily those used in the United States (USDA, *Composition of Foods* [1950 and 1963] and those of the Food and Agriculture Organization (FAO) [1949 and 1954]). Although Health and Welfare Canada has produced two publications of nutrient values — *Table of Nutrient Values Recommended For Use in Canada* [periodically since 1944] and *Nutrient Values of Some Common Foods* [1974 and 1979],² their reliance on American data is evident.

The data compiled by USDA are values currently considered most representative for each product described for the United States. The nutrient content of plant foods can vary greatly depending on factors such as variety, soil, fertilizer, size, degree of maturity, season, length of day, light intensity, temperature, etc. Much less variation can be noted in animal products as far as macronutrients are concerned. However, the iron and vitamin A content of animal tissue is dependent on the animal's diet. Canadian and American foods differ in their composition due to differences in enrichment levels and livestock grading and trimming procedures. Adjustments, therefore, should be made to American nutrient values prior to their application in Canadian studies.

6.3.2. Development of nutrient factors for use in Canadian studies

The procedure for calculating the nutrient composition of foods is very lengthy and costly. Since the availability and nutrient composition of many food items are similar for Canada and the United States, calculation of a complete Canadian set of nutrient values is not necessary.

The nutrient composition of some items, however, can be expected to differ between the two countries due to differences in enrichment levels and livestock grading and trimming procedures. For these items, it is possible to estimate factors that can be applied to American nutrient values for use in Canadian studies. Such a practice would require the cooperation of nutritionists, industry representatives, and scientists. As well, estimates of the nutrient composition of commercially prepared foods can be obtained from industry data, as these foods are manufactured according to predetermined formulas. Thus, users would be ensured of the availability of a complete and reliable nutrient data set for Canada.

6.3.2.1. Enrichment

The addition of certain nutrients to foods has been controlled in Canada for more than 25 years. In the late 1940s, regulations were established to define the amounts of vitamins and minerals that could be added to foods, and certain food standards, such as those for bread and flour, were modified to allow for the enrichment of these products. The addition of nutrients to certain foods served to correct a nutritional deficiency in some segments of the population (i.e., iodine added to table salt prevents goiter and vitamin D added to milk prevents rickets);

to replace nutrients removed from a staple food during manufacturing (i.e., addition of B-vitamins and iron to flour); and to ensure a reasonable nutritional quality in products sold as meal replacements or as substitutes for traditional foods (i.e., instant breakfast drinks and egg substitutes). Enrichment standards, namely the identification of foods that may be enriched, the nutrients that may be added, and the mandatory or optional nature of this enrichment are continually being revised to more closely meet the changing diet and nutritional needs of society. Thus, the revision of Canadian nutrient data must keep pace with policy changes.

6.3.2.2. Grading, trimming, and household wastage

Comparison of the nutrient intake level for an average Canadian, as based on *Apparent Per Capita Domestic Disappearance* data and on Nutrition Canada Survey data, shows a fairly large discrepancy in macronutrient intake. As one data source measures food availability at the wholesale level and the other the actual intake, a significant portion of this discrepancy can be attributed to various losses along the food chain from the farm to the consumer. Most food composition tables publish several sets of nutrient values for each food in order to reflect various levels of trimming and grading, length of storage, and degree of processing. While this breakdown takes into account losses up to the retail level, any loss (due to plate waste or additional trimming in the home) or the addition or loss of nutrients (due to cooking) cannot be accounted for. Also, in some fruits and vegetables, there is a higher concentration of vitamins in the outer layers, so that the loss of nutrients is more than directly proportionate to the level of peeling.

The problem of adjusting nutrient values for wastage is amplified when consumption is measured from disappearance data. For example, beef is reported on a carcass basis in disappearance data. Trimming and bone removal may occur at either the meat packing plant or the retail outlet. Adjustments for this accumulated loss along the food chain should be made in the nutrient values. After purchase by the consumer, further trimming may also occur. Developing of a set of factors to account for household wastage is impractical.

6.3.2.3. Weights and conversion factors

In 1962, the latest revision was made to Agriculture Canada's *Weights and Conversion Factors for Canadian Agricultural Products*. While useful 15 years ago, this publication is currently outdated for use in converting food products from the farm to the retail level. Revision of this publication is under way. The revised edition will allow a more accurate application of U.S. nutrient values for Canadian products than is now possible.

6.3.2.4. Nutrient composition of commercially prepared foods

Over the past five to ten years, the popularity of

commercially prepared foods has increased significantly, due to their convenience. Estimates of the nutrient composition of brand-name, commercially prepared foods are available from individual manufacturers. However, a weighted average of these nutrient values should be developed and compiled for similar foods. This compilation would enable an examination of the effect that increased food processing and changes in eating habits and lifestyles have on the health of Canadians.

¹ Tankage refers to offal not suitable for consumption by humans or for use in pet foods.

² The 1979 edition was not available when this study was begun.

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APPENDIX A

ACTUAL CONTRIBUTIONS BY MAJOR FOOD GROUPS TO TOTAL NUTRIENT INTAKE

Tables A.1 – A.13 — Disappearance Data

A.14 – A.27 — Survey Data

TABLE A.1. CONTRIBUTION BY MAJOR FOOD GROUPS TO FOOD ENERGY INTAKE: CALORIES PER DAY

Year	Cereals	Meat	Fats and Oils ^a	Sugars and Syrups	Dairy Products
cal/day					
1960	696.8	481.6	469.9	480.0	401.6
1961	689.2	470.2	468.3	462.5	397.5
1962	679.2	471.7	483.2	486.1	386.4
1963	711.1	484.1	490.6	475.2	391.2
1964	657.6	506.1	491.8	512.5	389.0
1965	739.4	506.2	478.1	517.9	388.2
1966	679.9	505.0	527.6	524.3	392.2
1967	677.3	533.1	529.1	515.8	385.8
1968	675.3	538.2	539.8	525.2	385.0
1969	692.6	536.2	544.4	508.7	392.7
1970	689.6	534.1	538.9	526.2	367.1
1971	659.6	582.5	544.7	533.7	364.4
1972	691.2	569.1	561.0	534.9	368.4
1973	684.4	520.0	552.9	559.6	375.3
1974	692.7	532.7	569.2	480.1	378.8
1975	707.0	528.4	551.6	461.3	366.1

^a Includes butter.**TABLE A.2. CONTRIBUTION BY MAJOR FOOD GROUPS TO FOOD ENERGY INTAKE: KILOJOULES PER DAY**

Year	Cereals	Meat	Fats and Oils ^a	Sugars and Syrups	Dairy Products
KJ/day					
1960	2881.0	1991.0	1943.0	1984.0	1660.0
1961	2849.0	1994.0	1936.0	1912.0	1643.0
1962	2808.0	1950.0	1998.0	2010.0	1597.0
1963	2940.0	2001.0	2028.0	1964.0	1617.0
1964	2719.0	2092.0	2033.0	2119.0	1608.0
1965	3057.0	2093.0	1976.0	2141.0	1605.0
1966	2811.0	2088.0	2181.0	2167.0	1621.0
1967	2800.0	2204.0	2187.0	2132.0	1595.0
1968	2792.0	2225.0	2232.0	2171.0	1592.0
1969	2863.0	2217.0	2251.0	2103.0	1623.0
1970	2851.0	2208.0	2228.0	2175.0	1518.0
1971	2727.0	2408.0	2252.0	2206.0	1506.0
1972	2857.0	2353.0	2319.0	2211.0	1523.0
1973	2829.0	2150.0	2286.0	2313.0	1551.0
1974	2864.0	2202.0	2353.0	1985.0	1566.0
1975	2923.0	2184.0	2280.0	1907.0	1513.0

^a Includes butter.**TABLE A.3. CONTRIBUTION BY MAJOR FOOD GROUPS TO PROTEIN INTAKE**

Year	Meat	Dairy Products	Cereals	Poultry	Fish	Nuts and Pulses
g/day						
1960	21.7	23.1	19.7	4.6	4.5	3.4
1961	21.1	23.3	19.6	5.2	4.2	3.4
1962	21.2	22.5	19.3	5.1	3.6	3.6
1963	21.7	23.0	20.1	5.5	4.5	3.4
1964	22.8	22.9	18.6	5.8	3.7	4.4
1965	23.1	22.7	20.8	6.1	3.9	3.8
1966	23.0	23.1	19.2	6.5	3.8	4.2
1967	23.9	22.6	19.1	6.8	3.6	3.9
1968	24.2	22.8	19.0	6.6	3.7	3.3
1969	24.2	23.7	19.5	7.2	3.8	3.3
1970	24.5	21.6	19.4	7.5	3.6	3.2
1971	24.9	21.2	18.5	7.4	3.5	4.0
1972	24.6	21.4	19.4	7.5	4.2	4.0
1973	24.5	22.0	19.1	7.8	3.6	3.3
1974	25.1	22.3	19.4	7.5	3.7	4.8
1975	25.8	21.7	19.8	7.0	3.7	5.3

TABLE A.4. CONTRIBUTION BY MAJOR FOOD GROUPS TO FAT INTAKE

Year	Fats and Oils ^a	Meat	Dairy Products
g/day			
1960	52.9	43.0	20.8
1961	52.7	42.1	20.1
1962	54.4	42.2	19.8
1963	55.3	43.4	19.7
1964	55.4	45.3	19.6
1965	53.9	45.1	19.7
1966	59.5	45.1	19.6
1967	59.6	47.7	19.6
1968	60.8	48.2	19.4
1969	61.4	48.0	19.4
1970	60.7	49.8	19.0
1971	61.4	52.8	19.1
1972	63.2	51.4	19.4
1973	62.3	46.0	19.9
1974	64.2	47.2	20.1
1975	62.2	46.3	19.3

^a Includes butter.

TABLE A.5. CONTRIBUTION BY MAJOR FOOD GROUPS TO CARBOHYDRATE INTAKE

Year	Cereals	Sugars and Syrups
g/day		
1960	145.6	124.1
1961	144.0	119.6
1962	141.9	125.7
1963	148.6	122.9
1964	137.4	132.5
1965	154.6	134.0
1966	142.2	135.6
1967	141.6	133.4
1968	141.4	135.8
1969	145.0	131.6
1970	144.4	136.1
1971	138.2	138.0
1972	144.8	138.3
1973	143.6	144.7
1974	145.2	124.2
1975	148.1	119.3

TABLE A.6. CONTRIBUTION BY MAJOR FOOD GROUPS TO CALCIUM AND PHOSPHORUS INTAKES

Year	Calcium		Phosphorus	
	Dairy Products	Dairy Products	Meat	Cereals
mg/day				
1960	817.4	654.4	205.7	194.8
1961	821.2	659.4	201.7	193.3
1962	792.0	636.5	202.5	189.9
1963	808.6	652.6	206.6	198.6
1964	804.7	649.7	216.5	186.4
1965	797.9	647.0	219.2	205.7
1966	811.9	660.3	217.5	189.3
1967	790.6	641.8	227.0	188.8
1968	794.4	646.3	229.1	184.9
1969	823.7	671.1	227.2	187.7
1970	747.7	610.5	230.3	189.4
1971	733.4	602.1	242.1	181.2
1972	738.7	608.0	237.8	189.0
1973	752.8	618.6	236.6	183.2
1974	758.6	625.8	242.7	186.7
1975	737.3	609.0	248.4	190.5

TABLE A.7. CONTRIBUTION BY MAJOR FOOD GROUPS TO VITAMIN A INTAKE

Year	Fats and Oils ^a	Other Vegetables ^b	Dairy Products	Meat
RE/day				
1960	282.2	299.1	189.9	221.3
1961	287.3	258.5	183.8	208.2
1962	298.1	287.5	181.0	199.7
1963	301.2	261.8	180.0	187.5
1964	295.6	259.4	179.3	184.4
1965	288.6	252.8	180.1	172.1
1966	284.5	259.0	179.5	172.2
1967	275.6	268.0	180.1	185.2
1968	279.9	239.7	178.1	176.9
1969	276.0	253.4	178.5	181.4
1970	267.8	276.8	174.9	164.0
1971	269.3	264.8	176.1	207.9
1972	268.6	249.6	179.3	195.8
1973	258.3	256.8	183.9	172.2
1974	266.8	302.5	186.5	177.2
1975	265.4	317.1	179.4	170.0

^a Includes butter.^b Includes tomatoes and tomato products.**TABLE A.8. CONTRIBUTION BY MAJOR FOOD GROUPS TO IRON INTAKE**

Year	Cereals	Meat	Fruit and Vegetables ^a
mg/day			
1960	5.0	3.3	2.9
1961	5.0	3.2	2.7
1962	4.9	3.2	2.8
1963	5.1	3.3	2.7
1964	4.8	3.4	2.7
1965	5.2	3.5	2.7
1966	4.9	3.5	2.7
1967	4.8	3.6	2.9
1968	4.8	3.6	2.8
1969	4.9	3.6	2.8
1970	4.9	3.6	2.8
1971	4.6	3.8	2.9
1972	4.8	3.8	2.8
1973	4.7	3.7	2.9
1974	4.8	3.8	3.0
1975	4.9	3.9	3.0

^a Includes tomatoes and tomato products, citrus and other fruit, other vegetables, and potatoes.

TABLE A.9. CONTRIBUTION BY MAJOR FOOD GROUPS TO THIAMINE INTAKE

Year	Cereals	Meat	Dairy Products
mg/day			
1960	0.70	0.38	0.24
1961	0.70	0.36	0.24
1962	0.69	0.36	0.23
1963	0.72	0.36	0.24
1964	0.67	0.38	0.24
1965	0.74	0.36	0.23
1966	0.69	0.35	0.24
1967	0.68	0.40	0.23
1968	0.67	0.39	0.23
1969	0.69	0.38	0.24
1970	0.69	0.42	0.22
1971	0.65	0.45	0.21
1972	0.68	0.41	0.21
1973	0.67	0.40	0.21
1974	0.68	0.41	0.22
1975	0.69	0.37	0.21

TABLE A.10. CONTRIBUTION BY MAJOR FOOD GROUPS TO RIBOFLAVIN INTAKE

Year	Dairy Products	Cereals	Meat
mg/day			
1960	1.08	0.55	0.29
1961	1.09	0.55	0.28
1962	1.05	0.54	0.28
1963	1.08	0.57	0.28
1964	1.07	0.53	0.28
1965	1.06	0.58	0.28
1966	1.09	0.55	0.28
1967	1.05	0.53	0.30
1968	1.06	0.53	0.30
1969	1.10	0.54	0.30
1970	0.99	0.54	0.29
1971	0.97	0.51	0.31
1972	0.98	0.53	0.30
1973	0.98	0.52	0.29
1974	1.00	0.53	0.30
1975	0.97	0.54	0.30

TABLE A.11. CONTRIBUTION BY MAJOR FOOD GROUPS TO NIACIN INTAKE

Year	Meat	Cereals	Dairy Products	Poultry and Fish
NE/day				
1960	9.8	8.7	6.2	3.7
1961	9.6	8.6	6.3	3.9
1962	9.6	8.5	6.0	3.7
1963	9.8	8.9	6.2	4.1
1964	10.3	8.2	6.1	4.1
1965	10.4	9.1	6.1	4.2
1966	10.3	8.5	6.2	4.4
1967	10.7	8.3	6.0	4.4
1968	10.9	8.3	6.1	4.4
1969	10.8	8.5	6.3	4.7
1970	10.9	8.5	5.7	4.8
1971	11.3	8.0	5.6	4.8
1972	11.1	8.4	5.7	5.1
1973	11.1	8.3	5.8	5.0
1974	11.4	8.4	5.9	4.9
1975	11.7	8.6	5.7	4.7

TABLE A.12. CONTRIBUTION BY MAJOR FOOD GROUPS TO ASCORBIC ACID INTAKE

Year	Potatoes	Citrus Fruit	Other Vegetables	Other Fruit	Tomatoes and Tomato Products
mg/day					
1960	33.7	19.6	16.8	9.4	12.0
1961	29.8	18.7	19.9	8.8	11.7
1962	32.7	18.1	17.0	9.4	12.0
1963	30.4	14.8	18.5	10.3	10.3
1964	31.2	15.6	18.1	10.6	9.7
1965	27.8	15.9	18.3	10.1	10.5
1966	28.6	16.6	17.9	10.8	9.3
1967	35.0	18.7	18.3	10.8	10.5
1968	30.6	16.6	20.3	10.5	9.6
1969	34.3	19.1	19.1	10.9	7.4
1970	30.9	18.8	20.9	10.7	10.2
1971	32.6	19.4	19.8	11.2	10.1
1972	32.8	20.0	20.4	10.2	8.1
1973	31.1	21.1	21.7	11.0	9.3
1974	29.7	21.5	22.6	10.9	13.0
1975	31.2	23.6	24.3	12.5	11.7

TABLE A.13. CONTRIBUTION BY MAJOR FOOD GROUPS TO TOTAL FOLATE INTAKE

Year	Cereals	Meat, Poultry, Fish, and Eggs	Other Vegetables	Dairy Products	Potatoes	Fruit	Nuts and Pulses
μ/day							
1960	44.6	44.6	26.8	27.9	22.1	15.4	12.9
1961	44.1	43.9	28.0	27.0	19.6	14.9	12.8
1962	43.4	43.5	27.2	26.2	21.4	14.9	13.1
1963	45.4	43.2	27.6	26.0	20.0	13.8	12.5
1964	42.3	43.4	26.8	25.9	20.5	14.4	15.8
1965	47.3	43.1	27.5	25.8	18.3	14.5	14.9
1966	43.4	42.5	27.2	25.7	18.7	14.7	18.7
1967	43.2	43.5	26.4	25.4	22.9	15.4	15.6
1968	42.7	43.7	28.4	24.9	20.1	14.8	13.5
1969	43.6	44.4	27.3	24.7	22.4	15.7	13.0
1970	43.7	44.9	28.7	23.8	20.3	15.4	12.2
1971	42.0	46.0	28.7	23.7	21.4	16.1	15.1
1972	43.9	45.1	27.9	24.0	21.5	16.0	16.7
1973	43.0	42.8	29.6	24.2	20.5	16.6	13.3
1974	43.6	42.8	31.1	24.0	19.6	17.0	19.5
1975	44.5	42.0	31.5	22.9	20.5	17.6	20.7

TABLE A.14. MAJOR COMMODITIES CONTRIBUTING TO FOOD ENERGY AVAILABILITY FROM FOOD PREPARED AT HOME: CALORIES PER DAY

Year and Income Group	Meat and Poultry	Bakery Products	Dairy Products ^a	Miscellaneous Groceries	Cereal Products	Fats and Oils
cal/day						
1969 – All Families	515.7	428.9	378.1	212.0	181.0	152.7
1st Quintile	468.0	441.4	353.6	209.1	185.0	168.8
2nd Quintile	496.2	432.1	354.0	221.4	174.5	166.6
3rd Quintile	524.3	457.6	393.4	214.7	209.1	163.9
4th Quintile	548.3	439.7	393.2	222.1	181.2	150.4
5th Quintile	516.1	399.6	387.7	191.5	153.5	130.5
1974 – All Families	486.4	360.3	329.9	211.0	215.5	215.6
1st Quintile	485.7	377.3	340.1	251.6	252.2	220.5
2nd Quintile	463.5	362.2	326.8	226.7	225.4	224.9
3rd Quintile	452.7	357.2	324.7	209.6	219.2	234.1
4th Quintile	503.8	385.7	337.1	215.7	205.4	215.1
5th Quintile	505.0	340.8	325.5	185.5	194.3	199.2

^a Includes butter.

TABLE A.15. MAJOR COMMODITIES CONTRIBUTING TO FOOD ENERGY AVAILABILITY FROM FOOD PREPARED AT HOME: KILOJOULES PER DAY

Year and Income Group	Meat and Poultry	Bakery Products	Dairy Products ^a	Miscellaneous Groceries	Cereal Products	Fats and Oils
kJ/day						
1969 – All Families	2132.0	1773.0	1563.0	876.0	748.0	631.0
1st Quintile	1935.0	1825.0	1462.0	864.0	765.0	698.0
2nd Quintile	2051.0	1786.0	1463.0	915.0	721.0	689.0
3rd Quintile	2167.0	1892.0	1626.0	888.0	864.0	678.0
4th Quintile	2267.0	1818.0	1625.0	918.0	749.0	622.0
5th Quintile	2134.0	1652.0	1603.0	792.0	635.0	539.0
1974 – All Families	2011.0	1489.0	1364.0	872.0	891.0	891.0
1st Quintile	2008.0	1560.0	1406.0	1040.0	1043.0	912.0
2nd Quintile	1916.0	1497.0	1351.0	937.0	932.0	930.0
3rd Quintile	1871.0	1477.0	1342.0	866.0	906.0	968.0
4th Quintile	2083.0	1594.0	1394.0	892.0	849.0	889.0
5th Quintile	2088.0	1409.0	1346.0	767.0	803.0	823.0

^a Includes butter.**TABLE A.16. MAJOR COMMODITIES CONTRIBUTING TO PROTEIN AVAILABILITY FROM FOOD PREPARED AT HOME**

Year and Income Group	Meat and Poultry	Dairy Products ^a	Bakery Products	Cereal Products	Eggs
g/day					
1969 – All Families	27.6	14.5	11.0	4.8	3.5
1st Quintile	25.3	13.8	11.1	5.1	3.8
2nd Quintile	26.9	13.4	11.1	4.7	3.3
3rd Quintile	28.0	15.1	11.9	5.6	3.7
4th Quintile	29.0	14.8	11.4	4.8	3.5
5th Quintile	27.5	15.0	10.2	4.0	3.2
1974 – All Families	27.3	13.9	9.4	5.6	3.3
1st Quintile	27.2	13.9	10.0	6.6	3.2
2nd Quintile	25.9	13.2	9.7	6.0	2.9
3rd Quintile	25.8	13.8	9.5	5.7	2.8
4th Quintile	28.1	14.4	9.6	5.2	2.9
5th Quintile	28.2	13.8	8.8	4.9	4.2

^a Includes butter.

TABLE A.17. MAJOR COMMODITIES CONTRIBUTING TO FAT AVAILABILITY FROM FOOD PREPARED AT HOME

Year and Income Group	Meat and Poultry	Dairy Products ^a	Fats and Oils	Bakery Products
	g/day			
1969 – All Families	44.0	27.6	16.6	8.8
1st Quintile	39.8	25.9	18.7	9.4
2nd Quintile	42.2	26.2	18.3	9.0
3rd Quintile	44.7	28.7	17.8	9.3
4th Quintile	47.0	28.8	16.3	8.9
5th Quintile	44.1	28.3	14.1	8.3
1974 – All Families	40.9	23.4	23.6	7.3
1st Quintile	40.9	24.9	24.3	7.4
2nd Quintile	39.0	23.8	24.8	7.1
3rd Quintile	37.8	22.8	25.6	7.0
4th Quintile	42.5	23.7	23.5	8.4
5th Quintile	42.5	23.2	21.7	7.0

^a Includes butter.**TABLE A.18. MAJOR COMMODITIES CONTRIBUTING TO CARBOHYDRATE AVAILABILITY FROM FOOD PREPARED AT HOME**

Year and Income Group	Bakery Products	Miscellaneous Groceries	Cereal Products
	g/day		
1969 – All Families	76.0	49.3	37.3
1st Quintile	77.9	48.6	38.2
2nd Quintile	76.5	51.7	35.9
3rd Quintile	81.3	49.5	43.1
4th Quintile	78.1	52.0	37.4
5th Quintile	70.7	44.0	31.6
1974 – All Families	63.5	49.2	44.8
1st Quintile	66.9	59.7	52.5
2nd Quintile	64.3	53.5	46.9
3rd Quintile	63.3	48.7	45.6
4th Quintile	66.9	50.0	42.7
5th Quintile	60.1	43.0	40.5

TABLE A.19. MAJOR COMMODITIES CONTRIBUTING TO CALCIUM AVAILABILITY FROM FOOD PREPARED AT HOME

Year and Income Group	Dairy Products ^a	Bakery Products
	mg/day	
1969 – All Families	490.9	147.7
1st Quintile	457.1	146.9
2nd Quintile	456.1	148.1
3rd Quintile	514.4	160.1
4th Quintile	504.3	153.0
5th Quintile	504.4	137.0
1974 – All Families	462.0	122.3
1st Quintile	258.5	129.0
2nd Quintile	440.6	126.7
3rd Quintile	463.5	123.8
4th Quintile	478.9	126.0
5th Quintile	453.2	115.1

^a Includes butter.

TABLE A.20. MAJOR COMMODITIES CONTRIBUTING TO PHOSPHORUS AVAILABILITY FROM FOOD PREPARED AT HOME

Year and Income Group	Dairy Products ^a	Meat and Poultry	Bakery Products	Cereal Products	Fresh Vegetables	Eggs
mg/day						
1969 – All Families	395.8	271.5	139.0	77.5	73.5	51.3
1st Quintile	367.0	249.7	141.2	76.1	72.6	56.0
2nd Quintile	366.8	264.8	139.5	74.6	76.8	49.3
3rd Quintile	414.0	275.6	149.2	90.4	70.0	54.7
4th Quintile	405.4	282.8	142.3	76.4	73.3	52.5
5th Quintile	408.6	272.3	129.8	68.4	75.4	47.7
1974 – All Families	376.5	267.8	112.1	84.4	65.2	48.5
1st Quintile	373.5	268.3	116.0	97.7	74.9	47.7
2nd Quintile	359.0	255.4	112.0	87.5	71.9	43.0
3rd Quintile	376.7	254.5	110.5	86.6	58.7	42.0
4th Quintile	390.0	274.9	123.3	81.5	65.9	43.6
5th Quintile	370.9	276.5	104.6	77.0	62.7	63.0

^a Includes butter.**TABLE A.21. MAJOR COMMODITIES CONTRIBUTING TO VITAMIN A AVAILABILITY FROM FOOD PREPARED AT HOME**

Year and Income Group	Meat and Poultry	Dairy Products ^a	Fresh Vegetables	Fats and Oils	Canned and Dried Vegetables	Eggs
RE/day						
1969 – All Families	342.8	259.0	168.6	93.6	86.8	44.4
1st Quintile	372.5	242.1	189.0	109.0	94.6	48.5
2nd Quintile	354.6	244.0	165.0	124.0	84.8	42.7
3rd Quintile	362.4	268.4	148.0	96.0	83.3	47.4
4th Quintile	287.7	269.9	161.9	86.8	81.9	45.5
5th Quintile	352.0	266.6	166.9	73.2	93.4	41.3
1974 – All Families	304.2	222.6	162.1	126.2	74.8	42.1
1st Quintile	370.1	234.0	207.5	161.6	85.2	41.3
2nd Quintile	362.5	224.6	167.9	128.4	75.0	37.2
3rd Quintile	319.0	216.4	131.9	124.7	64.8	36.4
4th Quintile	246.3	225.3	168.5	131.7	77.5	37.8
5th Quintile	280.0	221.4	157.1	108.8	80.1	54.6

^a Includes butter.

TABLE A.22. MAJOR COMMODITIES CONTRIBUTING TO IRON AVAILABILITY FROM FOOD PREPARED AT HOME

Year and Income Group	Meat and Poultry	Bakery Products	Cereal Products
mg/day			
1969 – All Families	4.3	2.9	1.7
1st Quintile	3.9	3.0	1.6
2nd Quintile	4.2	3.0	1.7
3rd Quintile	4.4	3.1	1.9
4th Quintile	4.4	3.0	1.6
5th Quintile	4.2	2.7	1.4
1974 – All Families	4.4	2.5	1.8
1st Quintile	4.3	2.6	1.9
2nd Quintile	4.2	2.5	2.1
3rd Quintile	4.2	2.5	1.8
4th Quintile	4.5	2.5	1.8
5th Quintile	4.5	2.3	1.6

TABLE A.23. MAJOR COMMODITIES CONTRIBUTING TO THIAMINE AVAILABILITY FROM FOOD PREPARED AT HOME

Year and Income Group	Meat and Poultry	Bakery Products	Cereal Products	Fresh Vegetables
mg/day				
1969 – All Families	0.39	0.27	0.19	0.13
1st Quintile	0.35	0.27	0.19	0.13
2nd Quintile	0.39	0.27	0.17	0.14
3rd Quintile	0.38	0.30	0.21	0.12
4th Quintile	0.40	0.28	0.19	0.13
5th Quintile	0.39	0.25	0.17	0.13
1974 – All Families	0.38	0.24	0.21	0.11
1st Quintile	0.38	0.25	0.23	0.13
2nd Quintile	0.37	0.25	0.22	0.13
3rd Quintile	0.35	0.24	0.20	0.10
4th Quintile	0.39	0.25	0.21	0.11
5th Quintile	0.40	0.22	0.19	0.11

TABLE A.24. MAJOR COMMODITIES CONTRIBUTING TO RIBOFLAVIN AVAILABILITY FROM FOOD PREPARED AT HOME

Year and Income Group	Dairy Products ^a	Meat and Poultry	Bakery Products	Cereal Products
mg/day				
1969 – All Families	0.62	0.38	0.22	0.22
1st Quintile	0.59	0.37	0.22	0.22
2nd Quintile	0.58	0.37	0.22	0.20
3rd Quintile	0.66	0.38	0.24	0.24
4th Quintile	0.65	0.37	0.22	0.23
5th Quintile	0.64	0.38	0.20	0.21
1974 – All Families	0.57	0.37	0.18	0.26
1st Quintile	0.56	0.41	0.19	0.27
2nd Quintile	0.54	0.38	0.19	0.26
3rd Quintile	0.58	0.38	0.18	0.25
4th Quintile	0.59	0.36	0.19	0.26
5th Quintile	0.56	0.36	0.17	0.25

^a Includes butter.**TABLE A.25. MAJOR COMMODITIES CONTRIBUTING TO NIACIN AVAILABILITY FROM FOOD PREPARED AT HOME**

Year and Income Group	Meat and Poultry	Bakery Products	Dairy Products ^a
NE/day			
1969 – All Families	12.32	4.26	3.66
1st Quintile	11.48	4.23	3.48
2nd Quintile	12.05	4.28	3.40
3rd Quintile	12.42	4.63	3.82
4th Quintile	12.79	4.44	3.74
5th Quintile	12.35	3.92	3.77
1974 – All Families	11.95	3.70	3.50
1st Quintile	12.24	3.94	3.49
2nd Quintile	11.42	3.85	3.33
3rd Quintile	11.43	3.75	3.50
4th Quintile	12.08	3.82	3.63
5th Quintile	12.27	3.45	3.44

^a Includes butter.

TABLE A.26. MAJOR COMMODITIES CONTRIBUTING TO ASCORBIC ACID AVAILABILITY FROM FOOD PREPARED AT HOME

Year and Income Group	Fresh Vegetables	Fresh Fruit	Canned and Dried Fruit
		mg/day	
1969 – All Families	33.7	24.2	8.8
1st Quintile	33.8	28.2	8.3
2nd Quintile	34.8	22.7	7.5
3rd Quintile	31.8	22.3	8.7
4th Quintile	33.8	23.2	9.5
5th Quintile	34.9	24.9	9.8
1974 – All Families	30.4	19.9	8.6
1st Quintile	34.8	23.0	8.0
2nd Quintile	33.0	22.5	7.6
3rd Quintile	26.8	18.3	9.0
4th Quintile	30.9	18.7	7.9
5th Quintile	29.9	19.8	9.5

TABLE A.27. MAJOR COMMODITIES CONTRIBUTING TO FOLATE AVAILABILITY FROM FOOD PREPARED AT HOME

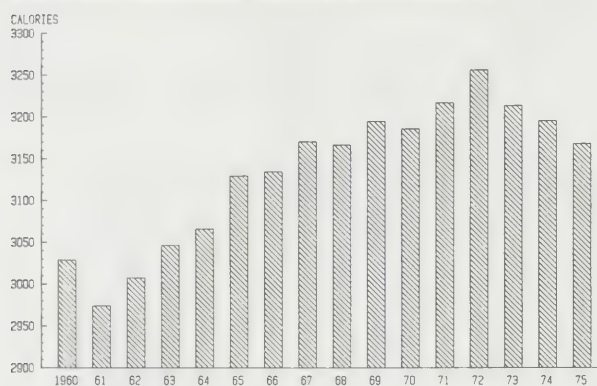
Year and Income Group	Bakery Products	Fresh Vegetables	Meat and Poultry	Fresh Fruit
		μ /day		
1969 – All Families	40.9	28.5	17.2	14.7
1st Quintile	40.8	28.5	16.9	17.0
2nd Quintile	41.2	29.1	17.1	13.9
3rd Quintile	44.4	26.4	17.5	14.0
4th Quintile	42.6	28.1	16.7	14.6
5th Quintile	37.7	30.2	17.4	14.6
1974 – All Families	35.3	27.5	16.6	12.7
1st Quintile	37.4	31.0	17.9	14.6
2nd Quintile	36.7	29.4	17.2	14.1
3rd Quintile	35.8	23.9	16.6	11.9
4th Quintile	36.3	27.8	15.7	12.2
5th Quintile	33.1	27.9	16.4	12.5

APPENDIX B

NUTRIENTS AVAILABLE FOR CONSUMPTION PER CAPITA PER DAY, 1960–75:
DISAPPEARANCE DATA

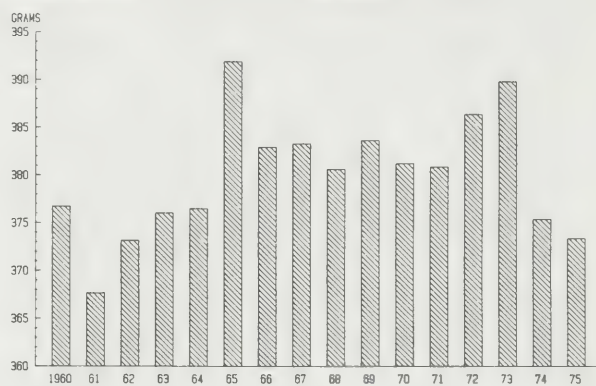
Figures B.1 – B.13

FIGURE B.1. FOOD ENERGY AVAILABLE FOR CONSUMPTION PER CAPITA PER DAY, 1960-75: DISAPPEARANCE DATA



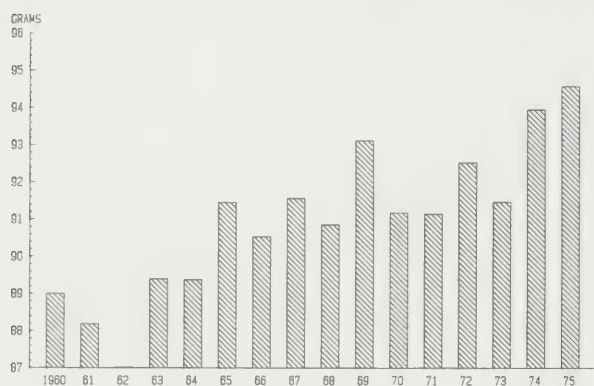
Source: Table 4.1.

FIGURE B.4. CARBOHYDRATES AVAILABLE FOR CONSUMPTION PER CAPITA PER DAY, 1960-75: DISAPPEARANCE DATA



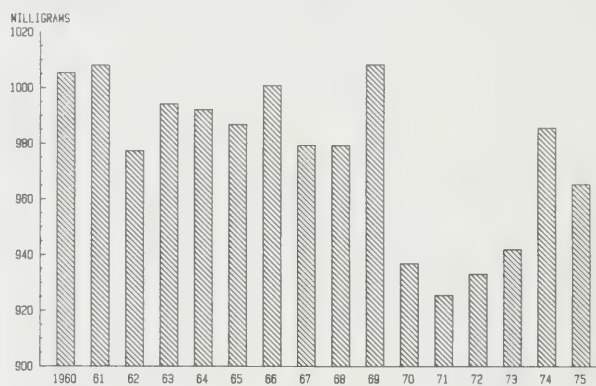
Source: Table 4.1.

FIGURE B.2. PROTEIN AVAILABLE FOR CONSUMPTION PER CAPITA PER DAY, 1960-75: DISAPPEARANCE DATA



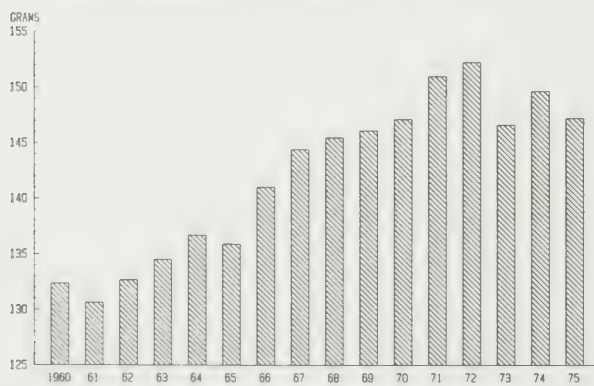
Source: Table 4.1.

FIGURE B.5. CALCIUM AVAILABLE FOR CONSUMPTION PER CAPITA PER DAY, 1960-75: DISAPPEARANCE DATA



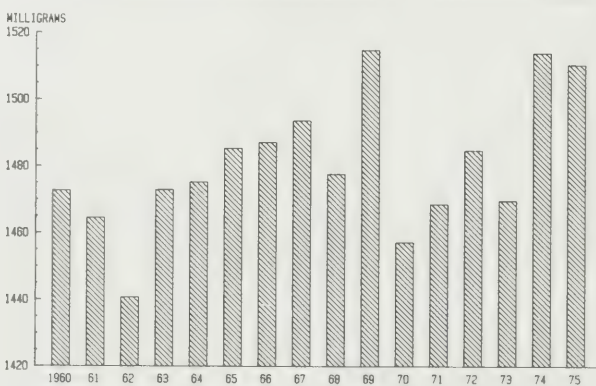
Source: Table 4.1.

FIGURE B.3. FAT AVAILABLE FOR CONSUMPTION PER CAPITA PER DAY, 1960-75: DISAPPEARANCE DATA



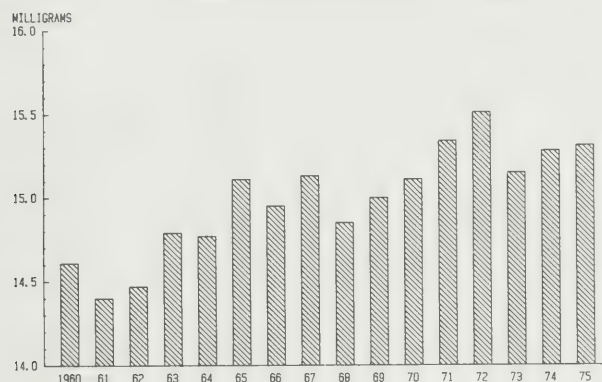
Source: Table 4.1.

FIGURE B.6. PHOSPHORUS AVAILABLE FOR CONSUMPTION PER CAPITA PER DAY, 1960-75: DISAPPEARANCE DATA



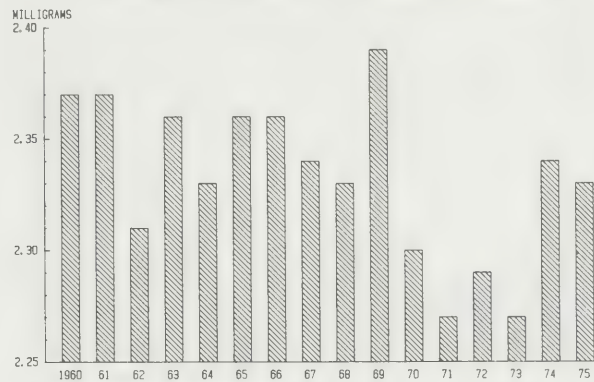
Source: Table 4.1.

FIGURE B.7. IRON AVAILABLE FOR CONSUMPTION PER CAPITA PER DAY, 1960-75: DISAPPEARANCE DATA



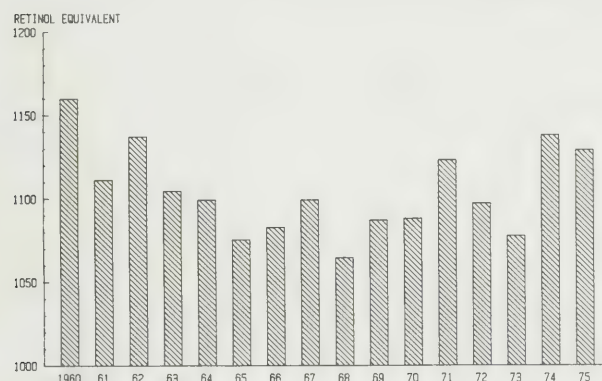
Source: Table 4.1.

FIGURE B.10. RIBOFLAVIN AVAILABLE FOR CONSUMPTION PER CAPITA PER DAY, 1960-75: DISAPPEARANCE DATA



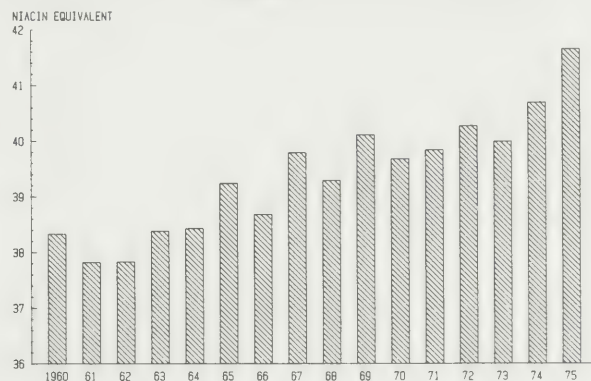
Source: Table 4.1.

FIGURE B.8. VITAMIN A AVAILABLE FOR CONSUMPTION PER CAPITA PER DAY, 1960-75: DISAPPEARANCE DATA



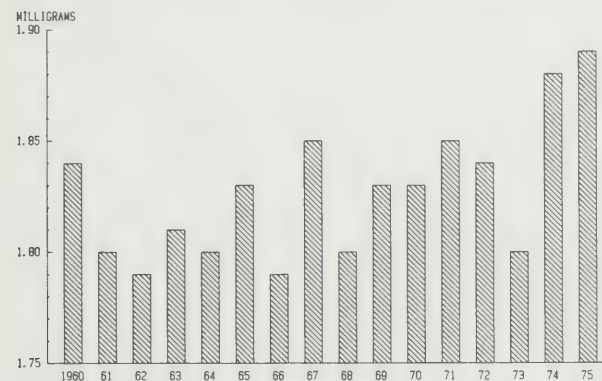
Source: Table 4.1.

FIGURE B.11. NIACIN AVAILABLE FOR CONSUMPTION PER CAPITA PER DAY, 1960-75: DISAPPEARANCE DATA



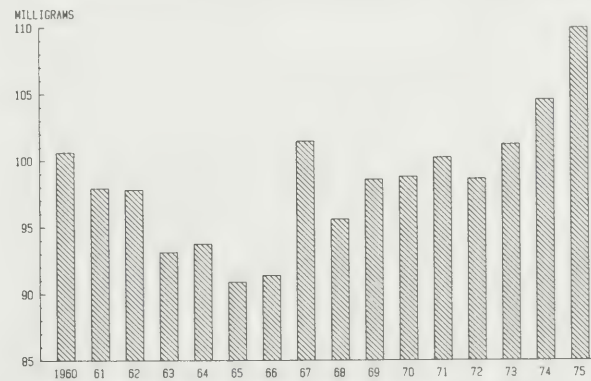
Source: Table 4.1.

FIGURE B.9. THIAMINE AVAILABLE FOR CONSUMPTION PER CAPITA PER DAY, 1960-75: DISAPPEARANCE DATA



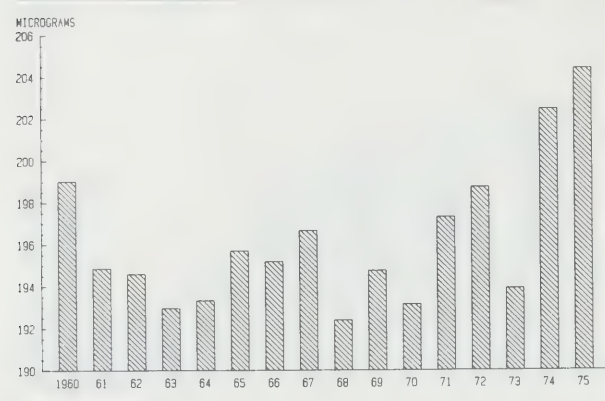
Source: Table 4.1.

FIGURE B.12. ASCORBIC ACID AVAILABLE FOR CONSUMPTION PER CAPITA PER DAY, 1960-75: DISAPPEARANCE DATA



Source: Table 4.1.

FIGURE B.13. TOTAL FOLATE AVAILABLE FOR CONSUMPTION PER CAPITA PER DAY, 1960-75: DISAPPEARANCE DATA



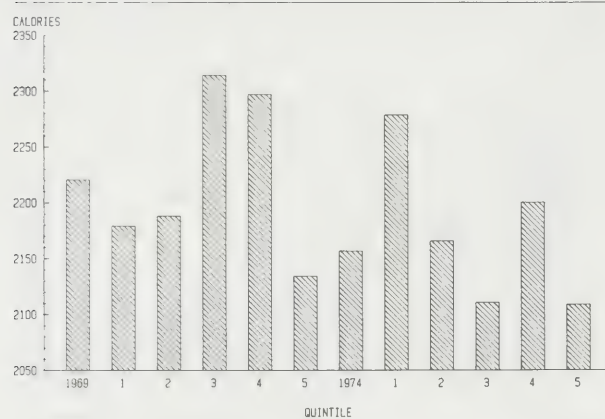
Source: Table 4.1.

APPENDIX C

NUTRIENTS AVAILABLE FROM FOOD PURCHASED PER CAPITA PER DAY,
1969 AND 1974

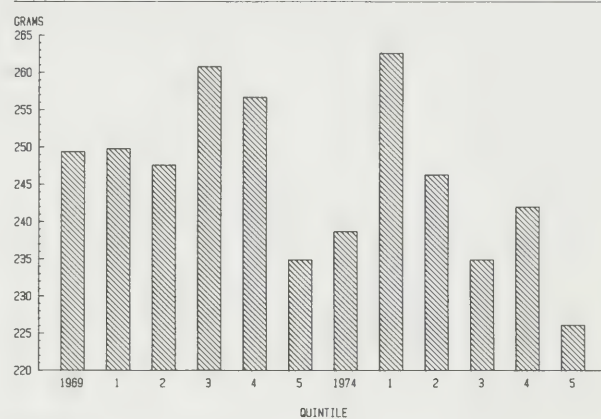
Figures C.1 – C.13

FIGURE C.1. FOOD ENERGY AVAILABLE FROM FOOD PURCHASED PER CAPITA PER DAY, 1969 AND 1974



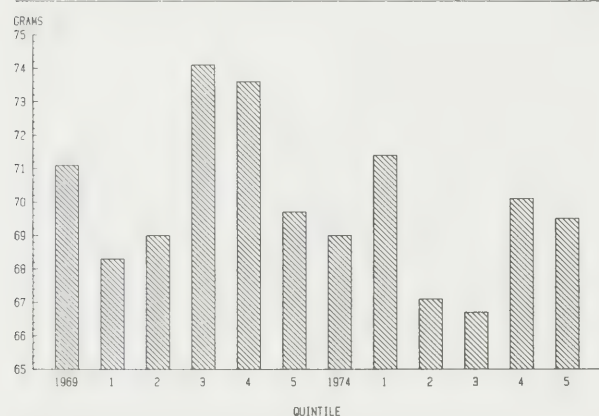
Source: Table 5.2.

FIGURE C.4. CARBOHYDRATES AVAILABLE FROM FOOD PURCHASED PER CAPITA PER DAY, 1969 AND 1974



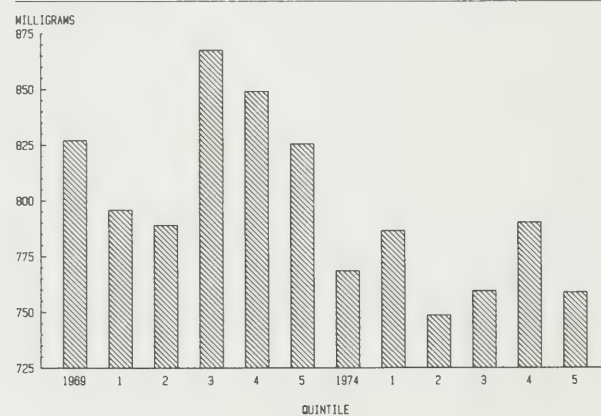
Source: Table 5.2.

FIGURE C.2. PROTEIN AVAILABLE FROM FOOD PURCHASED PER CAPITA PER DAY, 1969 AND 1974



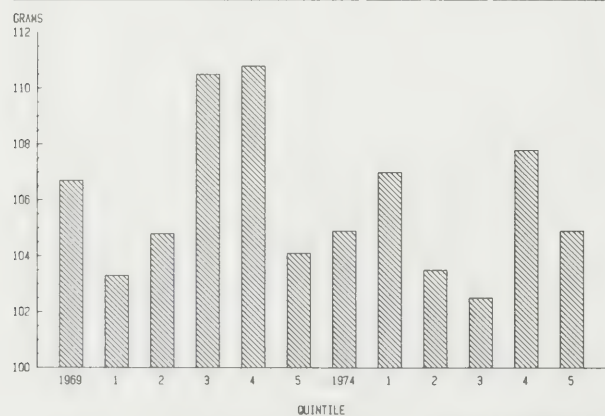
Source: Table 5.2.

FIGURE C.5. CALCIUM AVAILABLE FROM FOOD PURCHASED PER CAPITA PER DAY, 1969 AND 1974



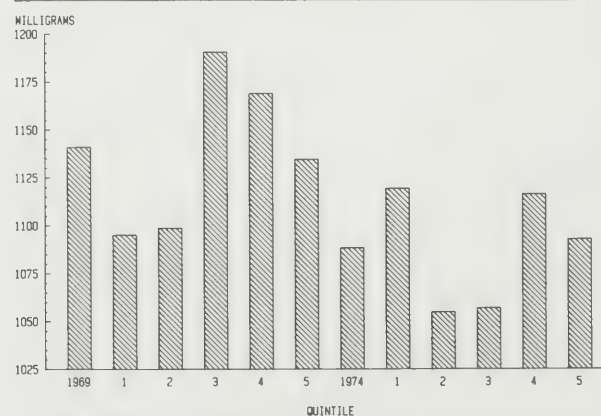
Source: Table 5.2.

FIGURE C.3. FAT AVAILABLE FROM FOOD PURCHASED PER CAPITA PER DAY, 1969 AND 1974



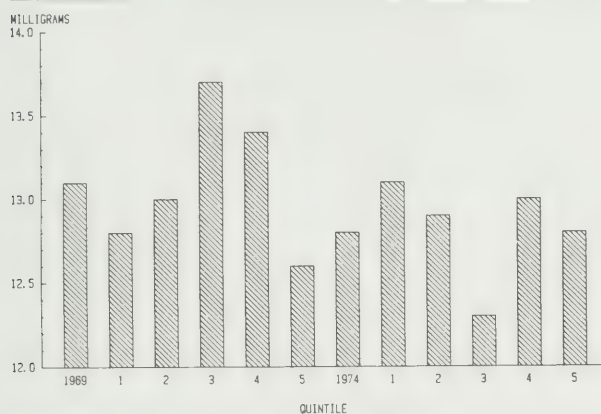
Source: Table 5.2.

FIGURE C.6. PHOSPHORUS AVAILABLE FROM FOOD PURCHASED PER CAPITA PER DAY, 1969 AND 1974



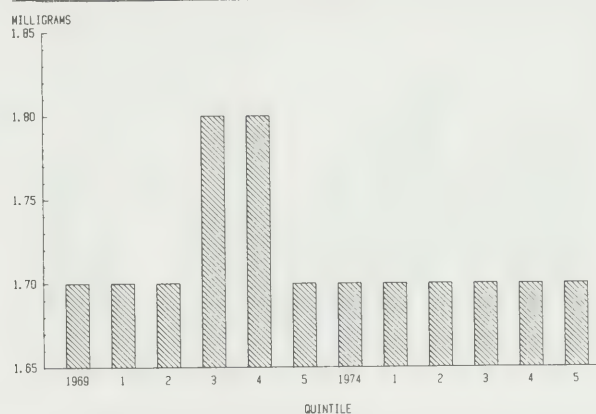
Source: Table 5.2.

FIGURE C.7. IRON AVAILABLE FROM FOOD PURCHASED PER CAPITA PER DAY, 1969 AND 1974



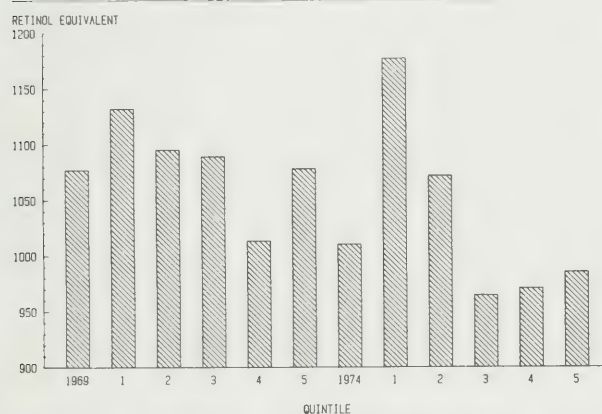
Source: Table 5.2.

FIGURE C.10. RIBOFLAVIN AVAILABLE FROM FOOD PURCHASED PER CAPITA PER DAY, 1969 AND 1974



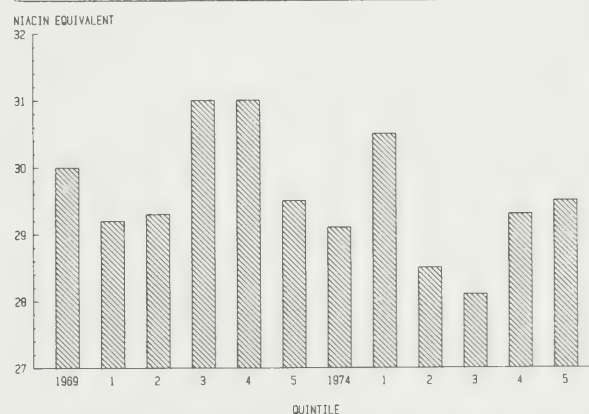
Source: Table 5.2.

FIGURE C.8. VITAMIN A AVAILABLE FROM FOOD PURCHASED PER CAPITA PER DAY, 1969 AND 1974



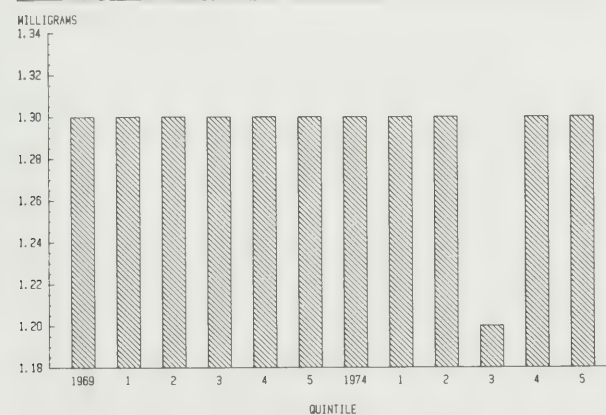
Source: Table 5.2.

FIGURE C.11. NIACIN AVAILABLE FROM FOOD PURCHASED PER CAPITA PER DAY, 1969 AND 1974



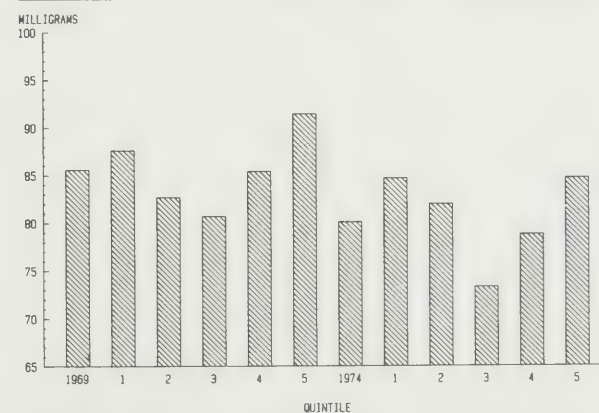
Source: Table 5.2.

FIGURE C.9. THIAMINE AVAILABLE FROM FOOD PURCHASED PER CAPITA PER DAY, 1969 AND 1974



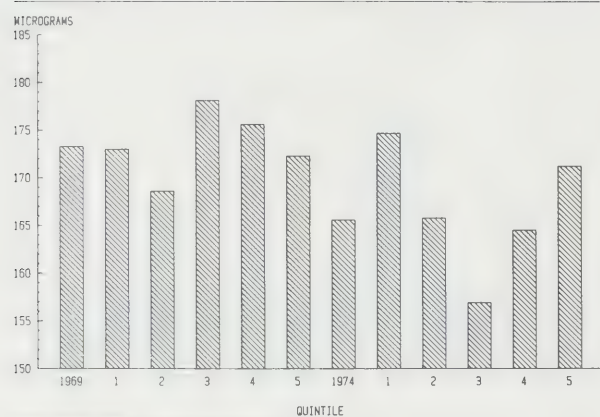
Source: Table 5.2.

FIGURE C.12. ASCORBIC ACID AVAILABLE FROM FOOD PURCHASED PER CAPITA PER DAY, 1969 AND 1974



Source: Table 5.2.

FIGURE C.13. TOTAL FOLATE AVAILABLE FROM FOOD PURCHASED PER CAPITA PER DAY, 1969 AND 1974



Source: Table 5.2.

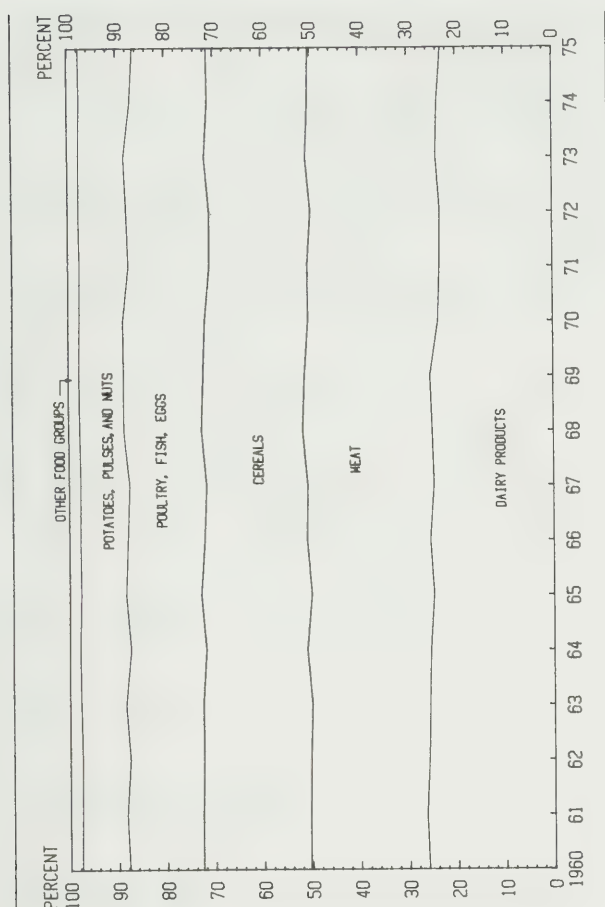
APPENDIX D

PERCENTAGE CONTRIBUTIONS TO NUTRIENTS BY MAJOR FOOD GROUPS:
DISAPPEARANCE DATA, 1960-75

Tables D.1 – D.13

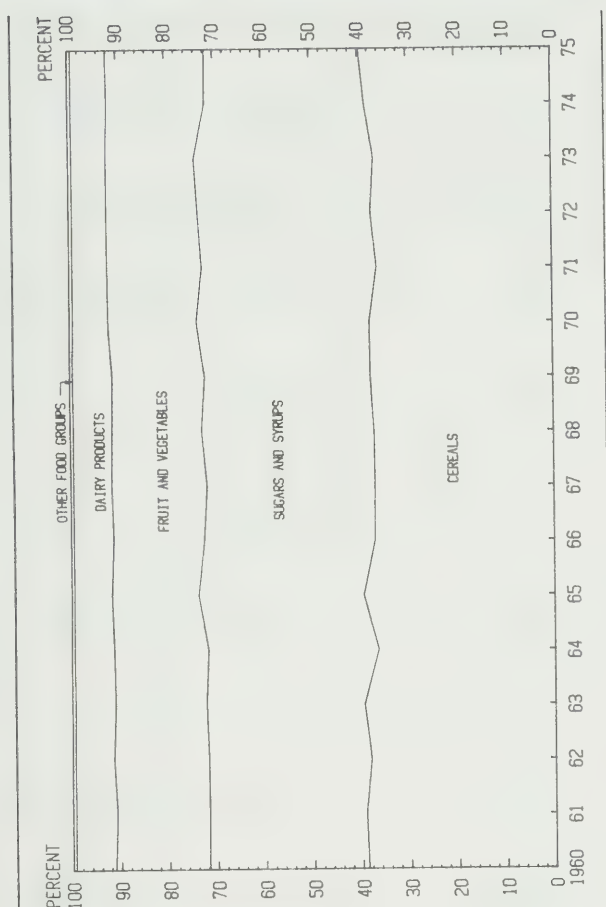
Figures D.1 – D.13

TABLE D.2. AND FIGURE D.2.
PERCENTAGE OF PROTEIN CONTRIBUTED BY
MAJOR FOOD GROUPS: DISAPPEARANCE DATA



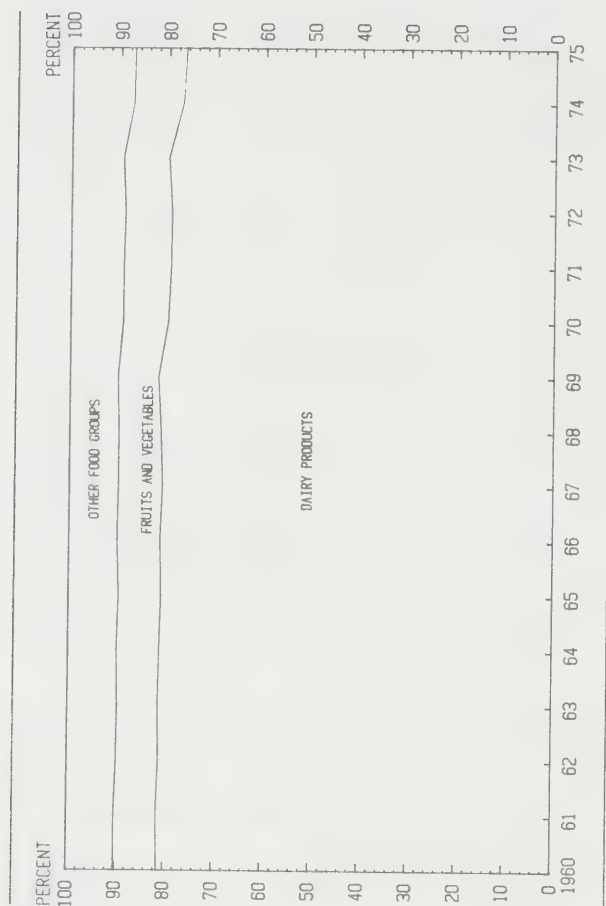
Food Group	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Dairy Products	26.0	26.4	25.9	25.7	25.5	24.8	25.5	24.7	25.0	25.4	23.7	23.3	23.2	24.0	23.7	22.9
Fruit	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5
Citrus	0.7	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.7
Other	4.0	3.5	3.9	3.6	3.7	3.2	3.3	4.0	3.5	3.8	3.5	3.7	3.7	3.6	3.3	3.5
Vegetables	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0	1.9	2.1	2.1	2.1
Potatoes	3.9	3.8	4.1	3.7	4.9	4.2	4.6	4.2	3.6	3.5	3.5	4.4	4.3	3.6	5.1	5.6
Pulses and Nuts	0.7	0.7	0.8	0.7	0.6	0.7	0.6	0.7	0.6	0.5	0.6	0.6	0.5	0.6	0.8	0.7
Tomatoes and Tomato Products	22.2	22.2	22.1	22.5	20.8	22.8	21.2	20.9	20.9	20.9	21.3	20.2	20.9	20.9	20.7	21.0
Cereals	24.4	24.0	24.4	24.3	25.5	25.2	25.4	26.0	26.7	25.9	26.8	27.3	26.7	26.9	26.7	27.3
Meat, Poultry, Fish, and Eggs	5.1	5.8	5.9	6.1	6.5	6.6	7.2	7.4	7.3	7.7	8.2	8.1	8.1	8.5	8.0	7.4
Meat	5.0	4.8	4.2	5.0	4.2	4.3	4.1	4.0	4.1	4.1	4.0	3.9	4.6	3.9	3.9	3.9
Poultry	5.1	5.1	5.1	4.8	4.8	4.6	4.5	4.5	4.6	4.6	4.7	4.7	4.4	4.2	4.0	3.9
Fish	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
Eggs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fats and Oils	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.3
Sugars and Syrups	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beverages	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.3

TABLE D.4. AND FIGURE D.4
PERCENTAGE OF CARBOHYDRATES CONTRIBUTED BY
MAJOR FOOD GROUPS: DISAPPEARANCE DATA



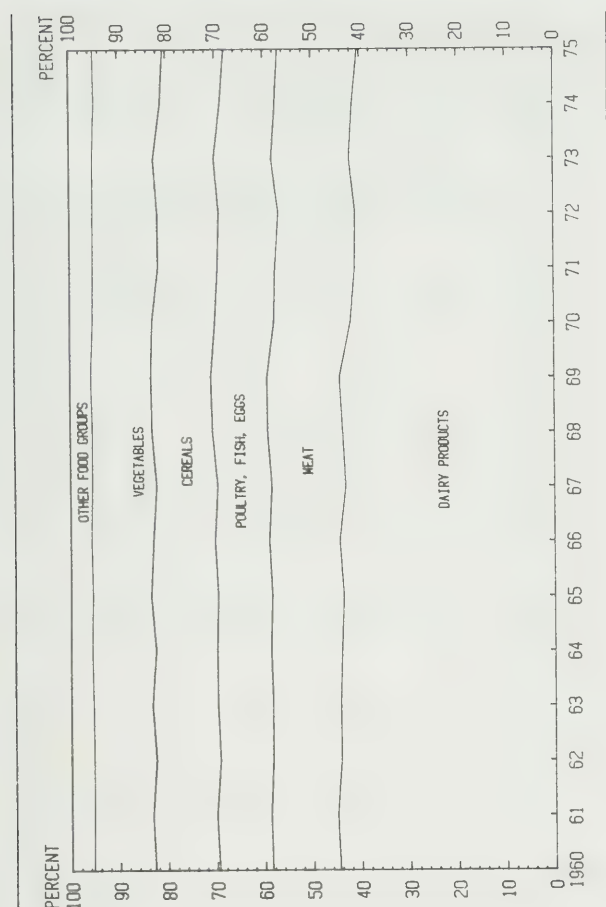
Food Group	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Dairy Products	8.2	8.5	8.0	8.3	8.2	7.8	8.2	7.9	8.0	8.2	7.3	7.2	7.1	7.1	7.4	7.2
Fruit	1.3	1.3	1.2	1.0	1.1	1.0	1.1	1.3	1.1	1.3	1.3	1.3	1.4	1.4	1.5	1.6
Citrus	5.6	5.7	5.9	6.0	6.0	5.9	5.9	5.7	5.8	5.7	5.5	5.8	5.4	5.6	5.9	5.8
Other	7.7	6.9	7.5	6.9	7.1	6.1	6.4	7.8	6.9	7.6	6.9	7.3	7.3	6.8	6.8	7.2
Potatoes	2.3	2.5	2.4	2.4	2.3	2.3	2.3	2.3	2.5	2.3	2.4	2.4	2.2	2.3	2.5	2.6
Other	1.6	1.7	1.6	1.6	2.2	1.7	2.1	1.7	1.3	1.4	1.3	1.9	1.8	1.2	2.3	2.2
Pulses and Nuts	0.9	1.0	1.0	0.9	0.8	0.9	0.9	0.9	0.9	0.8	0.9	0.9	0.8	0.9	1.2	1.1
Tomatoes and Tomato Products	38.8	39.2	38.1	39.5	36.5	39.5	37.1	37.0	37.1	37.8	37.9	36.3	37.5	36.8	38.6	39.7
Cereals	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Meat, Poultry, Fish, and Eggs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Meat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Poultry	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fish	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Eggs	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Fats and Oils	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sugars and Syrups	33.0	32.5	33.7	32.7	35.2	34.2	35.4	34.8	35.7	34.3	35.8	36.2	35.8	37.2	33.1	31.9
Beverages	0.5	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6

TABLE D.5. AND FIGURE D.5
PERCENTAGE OF CALCIUM CONTRIBUTED BY
MAJOR FOOD GROUPS: DISAPPEARANCE DATA



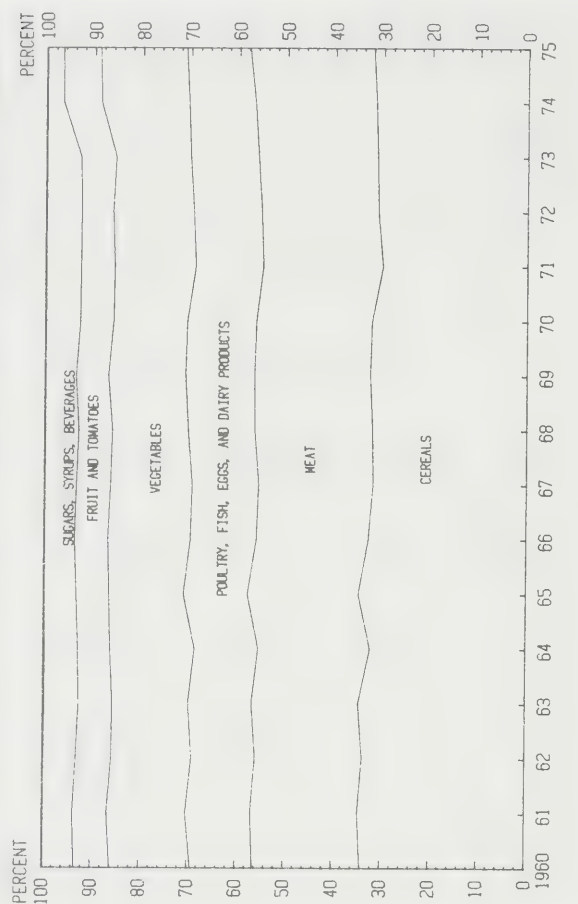
Food Group	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Dairy Products	81.3	81.5	81.1	81.3	81.1	80.8	81.1	80.7	81.1	81.7	79.8	79.3	79.2	79.9	77.0	76.4
Fruit	1.1	1.0	1.0	0.8	0.9	1.0	1.0	1.1	0.9	1.1	1.1	1.1	1.2	1.2	1.1	1.3
Citrus	1.1	1.1	1.1	1.2	1.2	1.2	1.1	1.2	1.2	1.1	1.2	1.3	1.2	1.2	1.2	1.2
Other	1.2	1.0	1.2	1.1	1.1	1.0	1.0	1.3	1.1	1.2	1.2	1.2	1.2	1.2	1.1	1.2
Potatoes	3.3	3.5	3.2	3.2	3.2	3.3	3.2	3.2	3.4	3.2	3.8	3.7	3.5	3.7	3.8	4.0
Other	1.5	1.5	1.5	1.5	1.9	1.7	2.1	1.7	1.5	1.4	1.4	1.9	2.0	1.5	2.2	2.2
Pulses and Nuts	0.7	0.6	0.7	0.6	0.5	0.6	0.5	0.6	0.6	0.4	0.6	0.6	0.5	0.6	0.8	0.7
Tomatoes and Tomato Products	3.4	3.4	3.4	3.5	3.3	3.7	3.3	3.4	3.3	3.3	3.6	3.5	3.6	3.4	3.3	3.5
Cereals	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.5	1.6	1.7	1.7	1.7	1.6	1.7
Meat, Poultry, Fish, and Eggs	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.6
Meat	0.5	0.5	0.5	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.6	0.6	0.8	0.7	0.6	0.6
Poultry	2.1	2.1	2.1	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.0	1.9	1.8	1.8
Fish	0.7	0.7	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Eggs	0.6	0.5	0.7	0.7	0.6	0.6	0.7	0.6	0.7	0.5	0.7	0.7	0.8	0.7	3.3	3.3
Fats and Oils	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.8	0.8
Sugars and Syrups	0.6	0.5	0.7	0.7	0.6	0.6	0.7	0.6	0.7	0.5	0.7	0.7	0.8	0.7	3.3	3.3
Beverages	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.8	0.8

TABLE D.6. AND FIGURE D.6
PERCENTAGE OF PHOSPHORUS CONTRIBUTED BY
MAJOR FOOD GROUPS: DISAPPEARANCE DATA



Food Group	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Dairy Products																
Fruit	44.5	45.0	44.2	44.3	44.0	43.6	44.4	43.1	43.7	44.3	42.0	41.0	40.9	42.1	41.4	40.3
Citrus	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
Other	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.0	1.0	1.1	1.0
Vegetables																
Potatoes	6.1	5.4	6.0	5.5	5.6	5.0	5.1	6.2	5.5	6.0	5.6	5.9	5.8	5.6	5.2	5.5
Other	2.8	2.9	2.9	3.0	2.8	2.9	2.9	2.8	3.1	2.8	3.1	3.1	3.0	3.2	3.2	3.3
Pulses and Nuts	3.8	3.8	4.0	3.7	4.8	4.2	4.8	4.3	3.7	3.6	3.6	4.5	4.6	3.8	5.3	5.7
Tomatoes and Tomato Products	1.0	1.0	1.0	0.9	0.8	0.9	0.8	0.9	0.9	0.7	0.9	0.9	0.8	0.9	1.1	1.0
Cereals	13.2	13.2	13.2	13.5	12.6	13.8	12.7	12.6	12.5	12.4	13.0	12.3	12.7	12.5	12.3	12.6
Meat, Poultry, Fish, and Eggs																
Meat	14.0	13.8	14.1	14.0	14.7	14.8	14.6	15.3	15.5	15.0	15.8	16.5	15.9	16.1	16.0	16.5
Poultry	3.0	3.4	3.5	3.6	3.9	4.0	4.3	4.4	4.4	4.6	5.0	4.9	5.0	5.2	4.9	4.6
Fish	3.4	3.2	2.8	3.5	2.9	3.0	2.8	2.7	2.8	2.8	2.8	2.7	3.2	2.8	2.8	2.8
Eggs	4.6	4.6	4.6	4.3	4.3	4.2	4.1	4.1	4.2	4.2	4.4	4.3	4.1	3.9	3.7	3.7
Fats and Oils	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Sugars and Syrups	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.4	0.4
Beverages	1.5	1.6	1.6	1.7	1.5	1.6	1.4	1.6	1.7	1.6	1.7	1.7	1.8	1.8	1.6	1.6

TABLE D.7. AND FIGURE D.7
PERCENTAGE OF IRON CONTRIBUTED BY
MAJOR FOOD GROUPS: DISAPPEARANCE DATA



Food Group	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Dairy Products	2.3	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.2	2.2	2.2	2.3	2.3	2.2
Fruit																
Citrus	1.2	1.1	1.1	0.9	0.9	0.9	1.0	1.1	1.0	1.1	1.1	1.1	1.2	1.3	1.3	1.4
Other	3.5	3.4	3.5	3.6	3.6	3.5	3.6	3.5	3.6	3.6	3.5	3.6	3.3	3.5	3.6	3.7
Vegetables																
Potatoes	6.9	6.2	6.8	6.2	6.3	5.5	5.7	6.9	6.2	6.8	6.1	6.4	6.3	6.1	5.8	6.1
Other	5.3	5.4	5.3	5.2	5.2	5.2	5.2	5.2	5.6	5.3	5.5	5.4	5.2	5.7	5.9	5.8
Pulses and Nuts	4.5	4.7	4.5	4.3	6.0	4.7	6.2	4.8	3.9	3.9	3.7	5.0	5.2	3.6	6.4	5.9
Tomatoes and Tomato Products	2.7	2.6	2.8	2.5	2.2	2.4	2.3	2.5	2.4	2.0	2.3	2.3	2.0	2.5	3.0	2.6
Cereals	34.1	34.6	33.7	34.6	32.2	34.7	32.7	31.8	32.0	32.5	32.2	30.0	31.0	31.2	31.5	32.1
Meat, Poultry, Fish, and Eggs																
Meat	22.3	22.2	22.2	22.1	23.2	23.0	23.2	23.7	24.4	24.0	24.0	24.8	24.2	24.7	25.1	25.7
Poultry	3.9	4.5	4.5	4.7	4.9	5.1	5.6	5.7	5.6	5.9	6.1	6.0	6.0	6.3	6.1	5.7
Fish	1.3	1.3	1.1	1.3	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.4	1.1	1.2	1.1
Eggs	5.4	5.3	5.3	4.9	4.9	4.8	4.7	4.7	4.8	4.9	4.9	4.7	4.5	4.4	4.2	4.2
Fats and Oils	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Sugars and Syrups	4.0	3.5	4.2	4.5	4.5	4.1	4.0	4.0	4.3	3.8	4.5	4.6	4.6	4.3	0.9	0.9
Beverages	2.4	2.6	2.5	2.6	2.4	2.5	2.2	2.5	2.6	2.5	2.6	2.6	2.7	2.8	2.5	2.4

TABLE D.8. AND FIGURE D.8

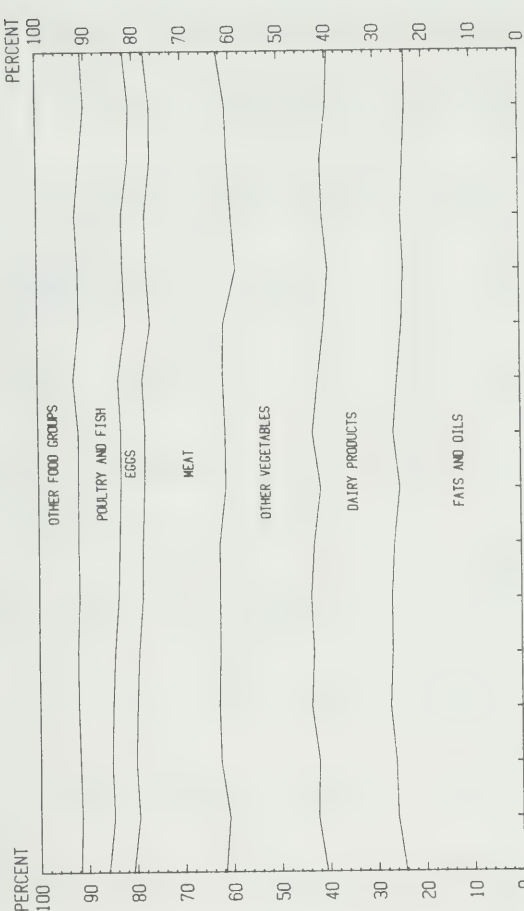
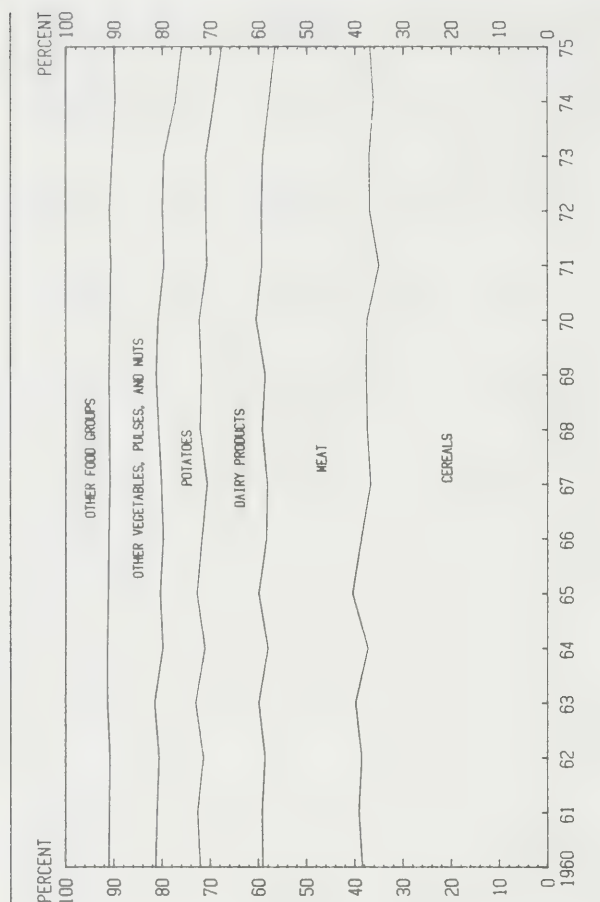
[illegible]

TABLE D.9. AND FIGURE D.9
PERCENTAGE OF THIAMINE CONTRIBUTED BY
MAJOR FOOD GROUPS: DISAPPEARANCE DATA

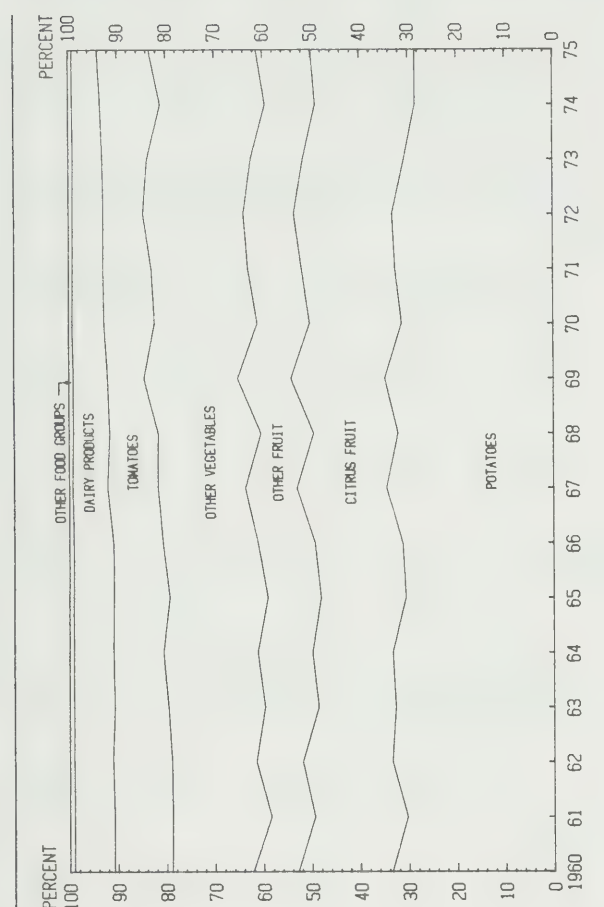
[illegible]

The chart displays the percentage distribution of four food groups in the U.S. diet from 1960 to 1975. The Y-axis represents the percentage from 0 to 100. The X-axis represents the years from 1960 to 1975. The food groups are stacked from bottom to top: Dairy Products, Meat, Poultry, Fish, and Eggs, Cereals, and Fruits and Vegetables.

Year	Dairy Products (%)	Meat, Poultry, Fish, and Eggs (%)	Cereals (%)	Fruits and Vegetables (%)
1960	18	28	32	22
1961	18	28	32	22
1962	18	28	32	22
1963	18	28	32	22
1964	18	28	32	22
1965	18	28	32	22
1966	18	28	32	22
1967	18	28	32	22
1968	18	28	32	22
1969	18	28	32	22
1970	18	28	32	22
1971	18	28	32	22
1972	18	28	32	22
1973	18	28	32	22
1974	18	28	32	22
1975	18	28	32	22

Food Group	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Dairy Products	45.7	46.2	45.3	45.6	45.9	45.0	46.1	44.8	45.3	45.7	43.0	42.8	42.7	43.3	42.6	41.8
Fruit																
Citrus	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
Other	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.7	1.6	1.6	1.6	1.7
Vegetables																
Potatoes	2.9	2.6	2.9	2.6	2.7	2.4	2.5	3.1	2.7	2.9	2.8	2.9	2.9	2.8	2.6	2.7
Other	2.5	2.7	2.7	2.8	2.7	2.7	2.7	2.7	3.0	2.8	3.1	3.1	3.2	3.4	3.5	3.6
Pulses and Nuts	1.2	1.2	1.2	1.1	1.6	1.3	1.4	1.3	1.0	1.0	1.1	1.5	1.4	1.1	1.7	1.7
Tomatoes and Tomato Products	1.0	1.0	1.0	0.9	0.8	0.9	0.8	0.9	0.8	0.7	0.9	0.9	0.8	0.9	1.1	1.0
Cereals	23.4	23.4	23.6	24.0	22.9	24.4	23.2	22.8	22.8	22.6	23.6	22.5	23.1	23.0	22.6	23.3
Meat, Poultry, Fish, and Eggs																
Meat	12.2	11.8	12.0	11.7	12.2	12.0	11.9	12.7	12.7	12.4	12.8	13.6	13.2	12.8	12.8	12.9
Poultry	2.4	2.6	2.7	2.8	3.0	3.1	3.3	3.5	3.4	3.7	4.1	4.0	4.1	4.3	4.0	3.8
Fish	1.1	1.0	0.9	1.1	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	0.9	0.9	0.9
Eggs	4.8	4.7	4.8	4.5	4.5	4.4	4.3	4.4	4.4	4.4	4.6	4.6	4.4	4.2	4.0	4.0
Fats and Oils	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
Sugars and Syrups	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.2
Beverages	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6	0.7	0.7	0.7	0.8	0.7	0.6

TABLE D.12. AND FIGURE D.12
PERCENTAGE OF ASCORBIC ACID CONTRIBUTED BY
MAJOR FOOD GROUPS: DISAPPEARANCE DATA

[illegible]

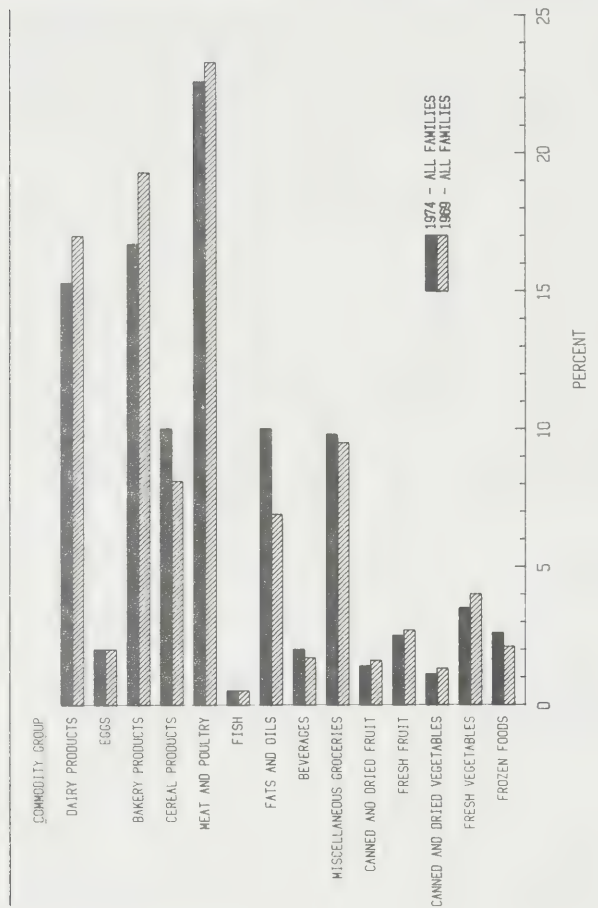
APPENDIX E

PERCENTAGE CONTRIBUTIONS TO NUTRIENTS BY ALL COMMODITIES: SURVEY DATA, 1969 AND 1974

Tables E.1 – E.13

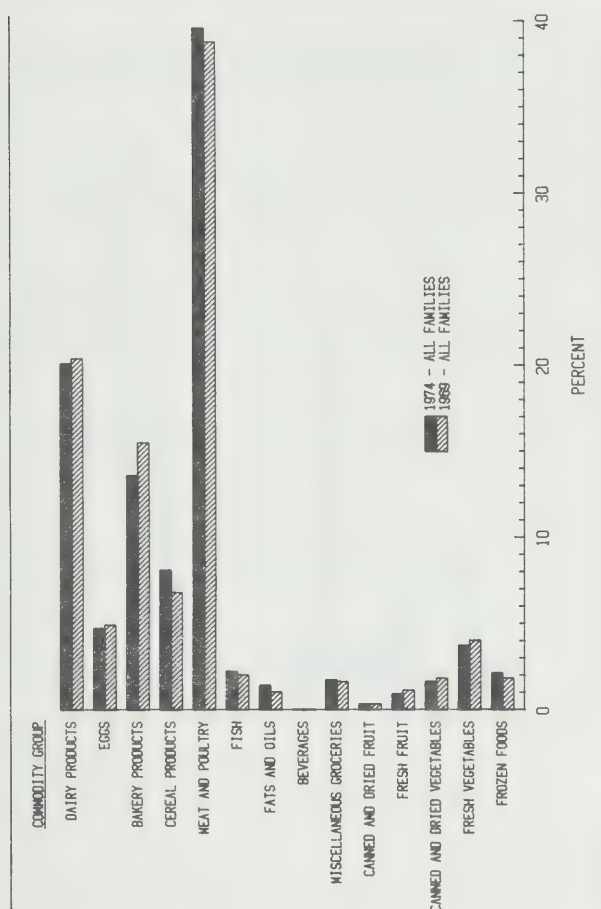
Figures E.1 – E.13

TABLE E.1. AND FIGURE E.1
PERCENTAGE OF FOOD ENERGY CONTRIBUTED BY
ALL COMMODITY GROUPS: SURVEY DATA



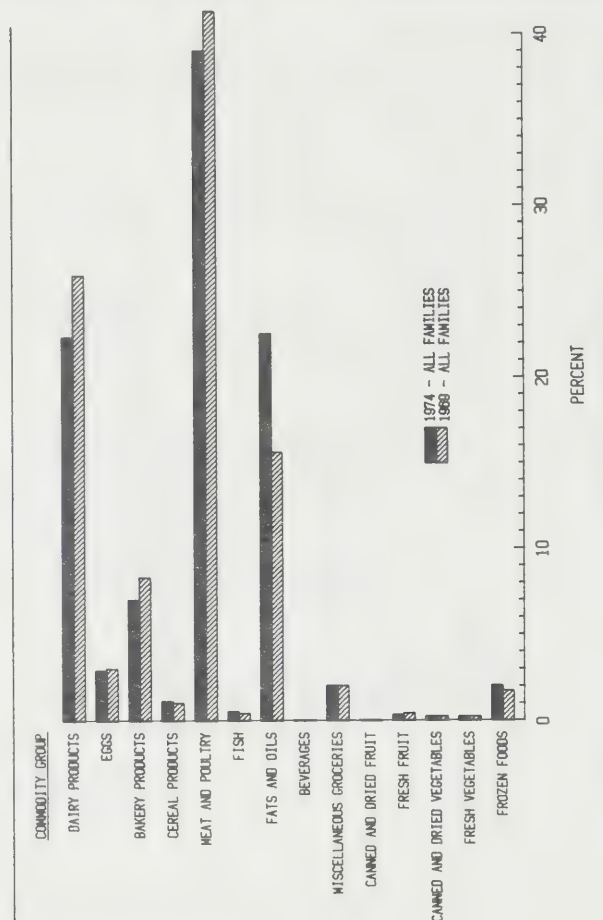
Commodity Group	1969					1974						
	All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile	All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile
Dairy Products	17.0	16.2	16.2	17.0	17.1	18.2	15.3	14.9	15.1	15.4	15.3	15.4
Eggs	2.0	2.2	2.0	2.1	2.0	2.0	2.0	1.8	1.7	1.7	1.7	2.6
Bakery Products	19.3	20.3	19.7	19.8	19.1	18.7	16.7	16.6	16.7	17.0	17.6	16.2
Cereal Products	8.1	8.5	8.0	9.0	7.9	7.2	10.0	11.1	10.4	10.4	9.3	9.2
Meat and Poultry	23.3	21.5	22.7	22.6	24.0	24.2	22.6	21.3	21.4	21.5	23.0	24.1
Fish	0.5	0.4	0.4	0.5	0.4	0.5	0.5	0.8	0.4	0.5	0.4	0.5
Fats and Oils	6.9	7.7	7.6	7.1	6.5	6.1	10.0	9.7	10.4	11.1	9.8	9.4
Beverages	1.7	1.7	1.7	1.8	1.7	1.8	2.0	1.7	2.0	2.0	2.0	2.1
Miscellaneous Groceries	9.5	9.6	10.1	9.3	9.7	9.0	9.8	11.0	10.5	9.9	9.8	8.8
Canned and Dried Fruit	1.6	1.7	1.4	1.4	1.6	1.7	1.4	1.5	1.4	1.4	1.3	1.6
Fresh Fruit	2.7	3.2	2.6	2.5	2.8	2.7	2.5	2.9	2.7	2.3	2.4	2.5
Canned and Dried Vegetables	1.3	1.3	1.3	1.3	1.2	1.2	1.1	1.0	1.1	0.9	1.1	1.1
Fresh Vegetables	4.0	4.0	4.4	3.7	3.9	4.3	3.5	3.9	4.0	3.3	3.5	3.4
Frozen Foods	2.1	1.7	1.9	1.9	2.1	2.4	2.6	1.8	2.2	2.6	2.8	3.1

TABLE E.2. AND FIGURE E.2
PERCENTAGE OF PROTEIN CONTRIBUTED BY
ALL COMMODITY GROUPS: SURVEY DATA



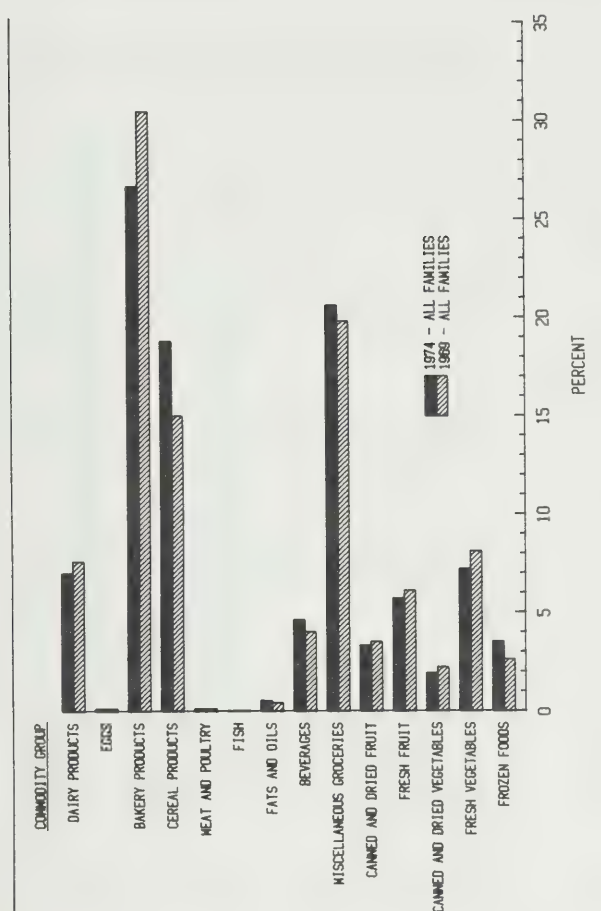
Commodity Group	1969					1974						
	All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile	All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile
Dairy Products	20.4	20.3	19.4	20.3	20.1	21.5	20.1	19.4	19.7	20.7	20.5	19.8
Eggs	4.9	5.5	4.8	5.0	4.8	4.6	4.7	4.5	4.3	4.2	4.2	6.1
Bakery Products	15.5	16.3	16.0	16.0	15.5	14.6	13.6	14.0	14.4	14.2	13.7	12.7
Cereal Products	6.8	7.5	6.8	7.5	6.6	5.8	8.1	9.3	9.0	8.6	7.5	7.1
Meat and Poultry	38.8	37.1	39.0	37.8	39.4	39.5	39.6	38.1	38.6	38.8	40.0	40.6
Fish	2.0	1.9	2.0	2.0	1.9	2.2	2.2	3.1	2.0	2.0	1.9	2.0
Fats and Oils	1.0	0.7	1.0	1.2	1.2	1.0	1.4	1.2	1.1	1.6	1.5	1.4
Beverages	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Miscellaneous Groceries	1.6	1.7	1.8	1.7	1.5	1.6	1.7	1.6	1.8	1.7	1.7	1.6
Canned and Dried Fruit	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Fresh Fruit	1.1	1.3	1.0	0.9	1.1	1.0	0.9	1.2	1.0	0.9	0.9	0.9
Canned and Dried Vegetables	1.8	1.8	1.8	1.9	1.8	1.7	1.6	1.5	1.6	1.4	1.7	1.6
Fresh Vegetables	4.0	4.1	4.4	3.7	3.9	4.2	3.7	4.1	4.2	3.5	3.7	3.5
Frozen Foods	1.8	1.5	1.7	1.7	1.9	2.0	2.1	1.7	2.0	2.1	2.4	2.4

TABLE E.3. AND FIGURE E.3
PERCENTAGE OF FAT CONTRIBUTED BY
ALL COMMODITY GROUPS: SURVEY DATA



Commodity Group	1969					1974						
	All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile	All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile
Dairy Products	25.9	25.1	25.0	25.9	26.0	27.3	22.3	23.2	23.0	22.2	22.0	22.2
Eggs	3.0	3.3	2.9	3.1	2.9	2.8	2.9	2.7	2.6	2.5	2.5	3.7
Bakery Products	8.3	9.1	8.6	8.4	8.0	8.0	7.0	6.9	6.8	6.9	7.8	6.7
Cereal Products	1.0	1.0	1.0	1.1	1.0	0.9	1.1	1.2	1.1	1.1	1.1	1.0
Meat and Poultry	41.3	38.5	40.3	40.5	42.5	42.4	39.0	38.2	37.7	37.0	39.4	40.6
Fish	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.8	0.4	0.4	0.4	0.4
Fats and Oils	15.6	18.1	17.4	16.1	14.7	13.6	22.5	22.7	24.0	25.0	21.8	20.7
Beverages	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Miscellaneous Groceries	2.0	2.1	2.0	2.1	1.9	2.0	2.0	1.9	1.9	2.1	2.1	1.8
Canned and Dried Fruit	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Fresh Fruit	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3
Canned and Dried Vegetables	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Fresh Vegetables	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Frozen Foods	1.7	1.5	1.6	1.6	1.8	1.8	2.0	1.5	1.8	2.1	2.2	2.2

TABLE E.4. AND FIGURE E.4
PERCENTAGE OF CARBOHYDRATES CONTRIBUTED BY
ALL COMMODITY GROUPS: SURVEY DATA

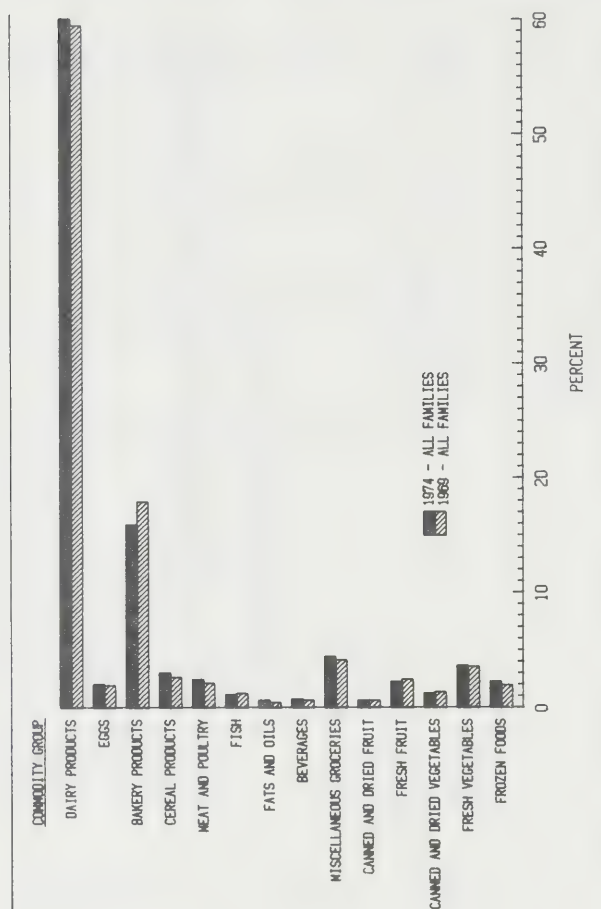


1969

1974

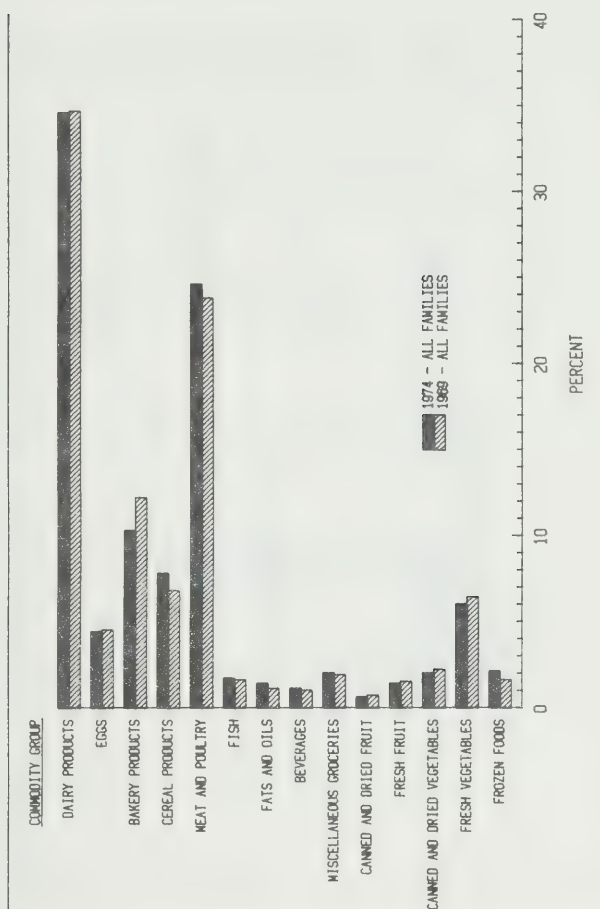
Commodity Group	1969					1974						
	All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile	All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile
Dairy Products	7.6	6.9	7.0	7.6	7.7	8.3	7.0	6.1	6.4	7.2	7.2	7.2
Eggs	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Bakery Products	30.5	31.3	30.9	31.3	30.4	30.2	26.7	25.5	26.2	27.1	27.7	26.6
Cereal Products	15.0	15.3	14.5	16.5	14.6	13.5	18.8	20.0	19.0	19.4	17.6	17.9
Meat and Poultry	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Fish	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fats and Oils	0.4	0.2	0.3	0.4	0.4	0.4	0.5	0.4	0.3	0.5	0.5	0.5
Beverages	4.0	3.8	3.9	4.1	3.9	4.3	4.6	3.8	4.5	4.6	4.7	5.1
Miscellaneous Groceries	19.8	19.4	20.9	19.0	20.2	18.7	20.6	22.8	21.8	20.7	20.7	19.0
Canned and Dried Fruit	3.5	3.8	3.3	3.2	3.6	3.9	3.3	3.3	3.0	3.2	3.0	3.9
Fresh Fruit	6.1	7.0	5.7	5.6	6.2	6.3	5.7	6.3	6.0	5.3	5.5	6.0
Canned and Dried Vegetables	2.2	2.2	2.3	2.3	2.2	2.2	1.9	1.7	1.9	1.7	2.0	2.0
Fresh Vegetables	8.1	7.8	8.7	7.5	7.9	8.7	7.2	7.6	7.9	6.7	7.1	7.0
Frozen Foods	2.6	2.1	2.3	2.3	2.7	3.3	3.5	2.3	2.8	3.4	3.8	4.5

TABLE E.5. AND FIGURE E.5
PERCENTAGE OF CALCIUM CONTRIBUTED BY
ALL COMMODITY GROUPS: SURVEY DATA



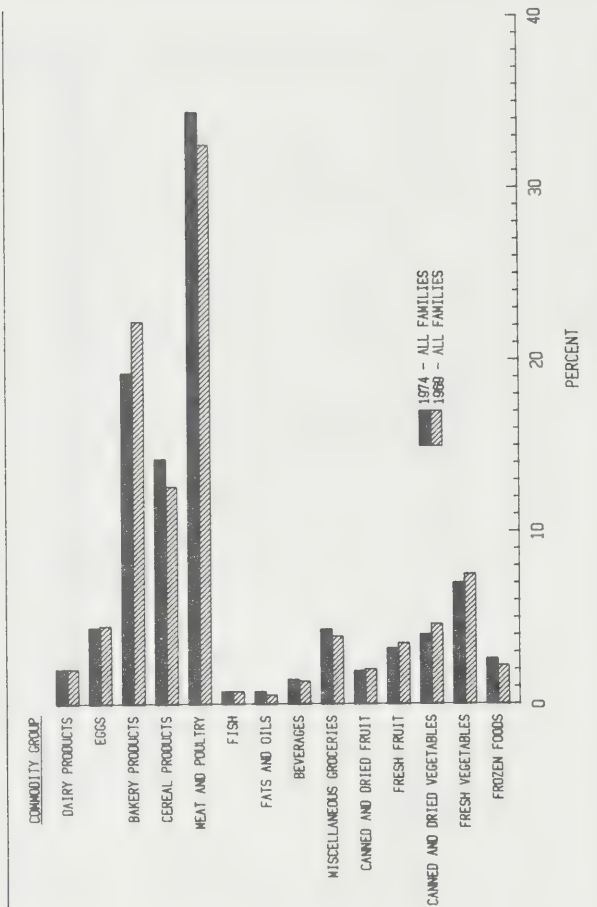
Commodity Group	1969					1974						
	All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile	All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile
Dairy Products	59.5	57.5	57.8	59.3	59.4	61.1	60.1	58.3	58.9	61.0	60.6	59.7
Eggs	1.9	2.2	1.9	2.0	1.9	1.8	2.0	1.9	1.8	1.7	1.7	2.6
Bakery Products	17.9	18.5	18.8	18.4	18.0	16.6	15.9	16.4	16.9	16.3	15.9	15.2
Cereal Products	2.6	2.3	2.7	2.8	2.6	2.4	3.0	3.0	3.3	3.2	3.0	2.8
Meat and Poultry	2.1	2.0	2.2	2.1	2.2	2.2	2.4	2.2	2.3	2.2	2.4	2.5
Fish	1.2	1.1	1.1	1.1	1.2	1.2	1.1	1.4	0.9	1.0	1.0	1.1
Fats and Oils	0.4	0.4	0.5	0.5	0.5	0.4	0.6	0.6	0.6	0.7	0.7	0.6
Beverages	0.6	0.9	0.7	0.6	0.6	0.6	0.7	0.9	0.7	0.7	0.6	0.8
Miscellaneous Groceries	4.1	4.7	4.3	4.1	4.0	3.7	4.4	4.6	4.4	4.3	4.3	4.4
Canned and Dried Fruit	0.6	0.7	0.6	0.6	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.7
Fresh Fruit	2.4	2.9	2.4	2.2	2.4	2.4	2.2	2.6	2.5	2.1	2.0	2.2
Canned and Dried Vegetables	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.3	1.2	1.1	1.3	1.3
Fresh Vegetables	3.5	3.8	3.7	3.1	3.3	3.6	3.6	4.1	3.9	3.1	3.5	3.7
Frozen Foods	1.9	1.7	2.0	1.9	2.0	2.0	2.2	2.0	2.0	2.0	2.4	2.4

TABLE E.6. AND FIGURE E.6
PERCENTAGE OF PHOSPHORUS CONTRIBUTED BY
ALL COMMODITY GROUPS: SURVEY DATA



Commodity Group	1969					1974						
	All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile	All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile
Dairy Products	34.7	33.8	33.4	34.8	34.7	36.1	34.6	33.4	34.0	35.6	35.0	33.9
Eggs	4.5	5.1	4.5	4.6	4.5	4.2	4.4	4.2	4.1	4.0	3.9	5.8
Bakery Products	12.2	12.9	12.7	12.5	12.2	11.4	10.3	10.4	10.6	10.5	11.0	9.6
Cereal Products	6.8	6.9	6.8	7.6	6.5	6.0	7.8	8.7	8.3	8.2	7.3	7.1
Meat and Poultry	23.8	22.8	24.1	23.1	24.2	24.0	24.6	24.0	24.2	24.1	24.6	25.3
Fish	1.6	1.6	1.6	1.6	1.6	1.7	1.7	2.4	1.6	1.6	1.5	1.6
Fats and Oils	1.1	0.7	1.0	1.3	1.3	1.0	1.4	1.3	1.2	1.7	1.6	1.5
Beverages	1.0	1.4	1.0	0.9	0.9	1.0	1.1	1.3	1.1	1.1	0.9	1.1
Miscellaneous Groceries	1.9	2.0	2.0	1.9	1.7	1.8	2.0	1.8	2.0	2.0	2.1	1.9
Canned and Dried Fruit	0.7	0.7	0.6	0.6	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.7
Fresh Fruit	1.5	1.8	1.5	1.4	1.5	1.5	1.4	1.6	1.6	1.3	1.3	1.4
Canned and Dried Vegetables	2.2	2.3	2.3	2.3	2.3	2.1	2.0	1.9	2.1	1.7	2.1	2.0
Fresh Vegetables	6.4	6.6	7.0	5.9	6.3	6.6	6.0	6.7	6.8	5.6	5.9	5.7
Frozen Foods	1.6	1.4	1.5	1.5	1.7	1.9	2.1	1.6	1.8	2.0	2.2	2.4

TABLE E.7. AND FIGURE E.7
PERCENTAGE OF IRON CONTRIBUTED BY
ALL COMMODITY GROUPS: SURVEY DATA



Commodity Group	1969					1974						
	All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile	All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile
Dairy Products	2.0	1.9	1.8	2.0	1.9	2.1	2.0	2.0	2.0	2.1	2.0	2.0
Eggs	4.5	5.0	4.4	4.6	4.5	4.4	4.4	4.2	3.8	3.9	3.9	5.7
Bakery Products	22.2	23.1	22.7	22.9	22.5	21.2	19.2	19.9	19.8	20.3	19.6	17.8
Cereal Products	12.6	12.6	13.3	13.9	12.1	11.3	14.2	14.3	16.1	14.7	13.5	12.8
Meat and Poultry	32.5	30.2	32.1	31.9	33.1	33.6	34.4	32.8	32.5	34.1	35.1	35.4
Fish	0.7	0.6	0.6	0.6	0.6	0.7	0.7	0.9	0.6	0.6	0.6	0.6
Fats and Oils	0.5	0.3	0.4	0.6	0.6	0.5	0.7	0.5	0.5	0.8	0.7	0.7
Beverages	1.3	1.8	1.3	1.1	1.2	1.3	1.4	1.6	1.4	1.4	1.2	1.5
Miscellaneous Groceries	3.9	4.2	4.0	4.0	3.7	3.8	4.3	4.2	4.2	4.4	4.4	4.3
Canned and Dried Fruit	2.0	2.2	1.8	1.8	2.0	2.2	1.9	2.1	1.7	1.9	1.7	2.0
Fresh Fruit	3.5	4.0	3.3	3.2	3.5	3.6	3.2	3.7	3.5	3.0	3.1	3.2
Canned and Dried Vegetables	4.6	4.7	4.6	4.7	4.7	4.5	4.0	4.0	4.0	3.7	4.3	4.2
Fresh Vegetables	7.5	7.7	7.8	6.7	7.3	8.1	7.0	7.9	7.6	6.5	7.0	6.9
Frozen Foods	2.2	1.7	1.9	2.0	2.3	2.7	2.6	1.9	2.3	2.6	2.9	2.9

TABLE E.8. AND FIGURE E.8

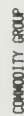
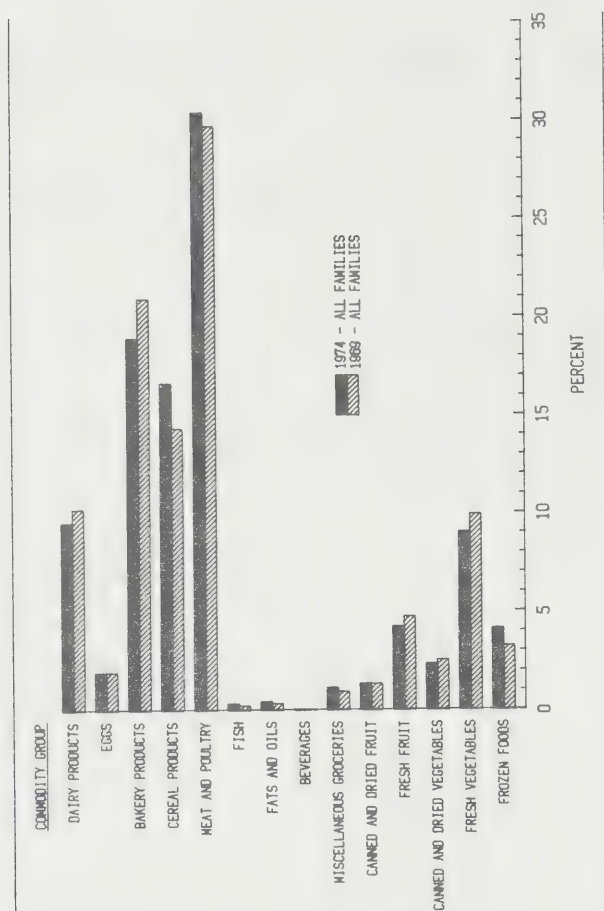
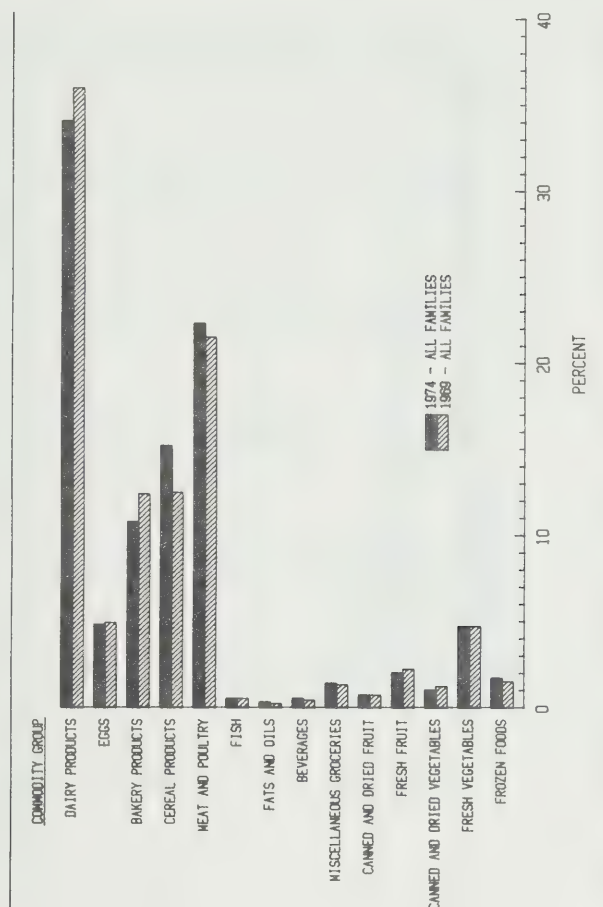
19691974

TABLE E.9. AND FIGURE E.9
PERCENTAGE OF THIAMINE CONTRIBUTED BY
ALL COMMODITY GROUPS: SURVEY DATA



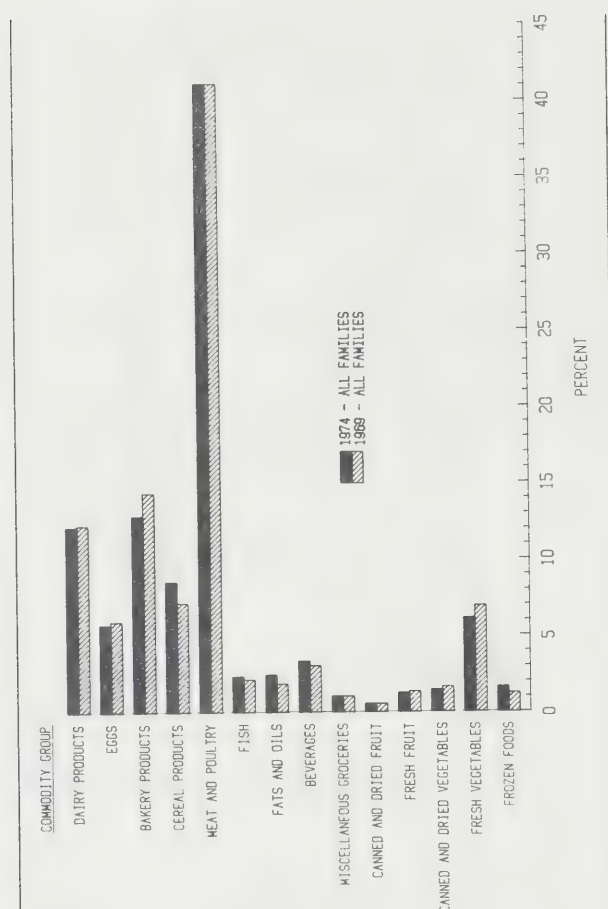
Commodity Group	1969					1974						
	All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile	All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile
Dairy Products	10.2	9.7	9.6	10.4	10.3	10.7	9.5	8.9	8.9	10.1	9.7	9.3
Eggs	1.9	2.2	1.9	2.0	1.9	1.8	1.9	1.8	1.7	1.7	1.7	2.4
Bakery Products	20.9	21.3	21.5	22.1	21.2	19.6	18.9	18.9	19.5	19.9	19.4	17.7
Cereal Products	14.3	15.3	13.6	15.5	13.9	13.1	16.6	18.0	17.3	16.9	16.0	15.5
Meat and Poultry	29.7	28.1	30.5	28.5	29.8	30.6	30.4	29.4	29.7	29.7	30.7	32.0
Fish	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.2	0.3	0.2	0.2
Fats and Oils	0.3	0.2	0.2	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.4
Beverages	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Miscellaneous Groceries	0.9	0.9	1.0	1.0	0.9	0.9	1.1	0.9	1.1	1.1	1.1	1.0
Canned and Dried Fruit	1.3	1.4	1.2	1.2	1.3	1.4	1.3	1.4	1.2	1.3	1.2	1.4
Fresh Fruit	4.7	5.5	4.5	4.2	4.6	4.6	4.2	4.8	4.5	4.1	3.9	4.2
Canned and Dried Vegetables	2.5	2.6	2.5	2.6	2.6	2.3	2.3	2.3	2.3	2.1	2.4	2.4
Fresh Vegetables	9.9	10.0	10.6	9.2	9.7	10.3	9.0	10.0	10.0	8.5	8.9	8.5
Frozen Foods	3.2	2.6	2.7	2.8	3.3	4.1	4.1	2.8	3.3	3.9	4.4	5.0

TABLE E.10. AND FIGURE E.10
PERCENTAGE OF RIBOFLAVIN CONTRIBUTED BY
ALL COMMODITY GROUPS: SURVEY DATA



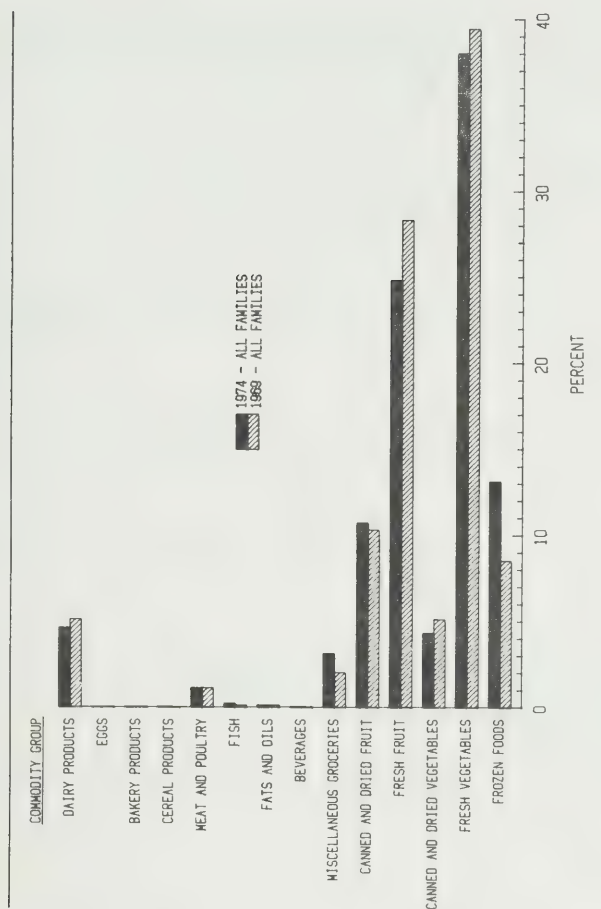
Commodity Group	1969					1974						
	All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile	All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile
Dairy Products	36.0	34.4	34.9	36.1	36.5	37.1	34.1	32.3	32.8	35.0	34.9	33.5
Eggs	4.9	5.5	4.9	5.0	4.9	4.6	4.8	4.6	4.3	4.2	4.3	6.3
Bakery Products	12.4	12.6	13.1	12.9	12.6	11.5	10.8	11.0	11.3	11.1	11.3	10.1
Cereal Products	12.5	12.6	11.8	13.0	12.7	12.0	15.2	15.4	15.7	14.8	15.4	15.0
Meat and Poultry	21.5	21.7	22.3	21.1	20.7	21.8	22.3	23.3	22.8	23.1	21.0	21.9
Fish	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.8	0.5	0.5	0.5	0.5
Fats and Oils	0.2	0.1	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.3	0.3	0.3
Beverages	0.4	0.5	0.4	0.3	0.3	0.4	0.5	0.6	0.5	0.4	0.5	0.5
Miscellaneous Groceries	1.3	1.4	1.4	1.4	1.3	1.3	1.4	1.3	1.4	1.4	1.5	1.4
Canned and Dried Fruit	0.7	0.8	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.7
Fresh Fruit	2.2	2.5	2.1	2.0	2.1	2.1	2.0	2.3	2.2	1.9	1.9	1.9
Canned and Dried Vegetables	1.2	1.2	1.3	1.2	1.2	1.1	1.0	1.0	1.1	0.9	1.1	1.1
Fresh Vegetables	4.7	4.9	5.0	4.2	4.6	5.0	4.7	5.1	5.1	4.2	4.8	4.9
Frozen Foods	1.5	1.3	1.5	1.4	1.6	1.7	1.7	1.4	1.5	1.6	1.9	1.9

TABLE E.11. AND FIGURE E.11
PERCENTAGE OF NIACIN CONTRIBUTED BY
ALL COMMODITY GROUPS: SURVEY DATA



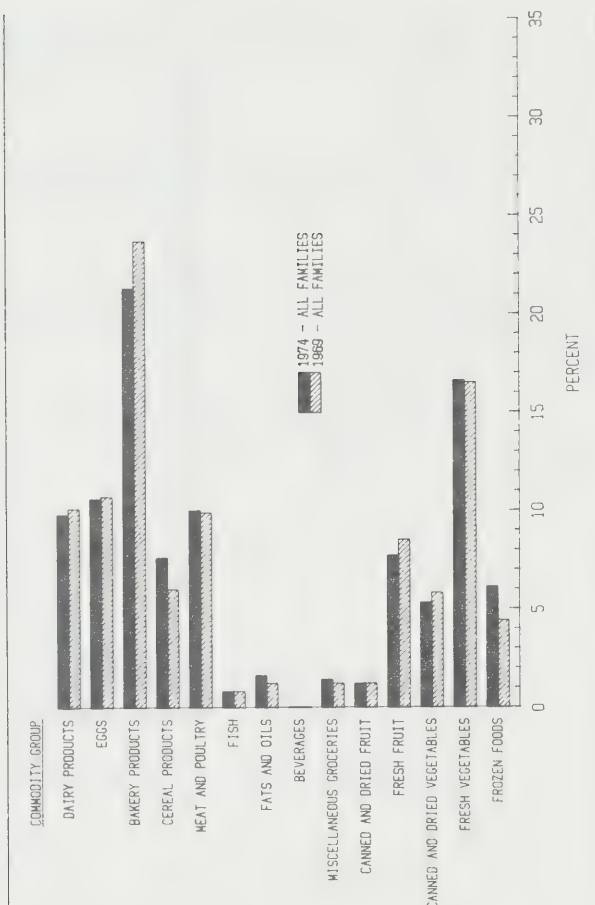
Commodity Group	1969					1974						
	All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile	All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile
Dairy Products	12.2	11.9	11.6	12.3	12.1	12.8	12.1	11.4	11.7	12.5	12.4	11.8
Eggs	5.9	6.6	5.8	6.1	5.8	5.6	5.7	5.4	5.2	5.1	5.1	7.4
Bakery Products	14.3	14.5	14.6	14.9	14.3	13.3	12.8	12.9	13.5	13.3	13.0	11.7
Cereal Products	7.1	7.6	6.8	7.7	7.0	6.5	8.5	9.1	9.1	8.6	8.3	7.8
Meat and Poultry	41.1	39.4	41.2	40.0	41.4	41.9	41.1	40.2	40.2	40.6	41.2	41.8
Fish	2.1	1.9	2.1	2.1	2.1	2.3	2.3	3.0	2.2	2.2	2.1	2.2
Fats and Oils	1.8	1.1	1.6	2.3	2.2	1.7	2.4	2.0	1.8	1.8	2.8	2.5
Beverages	3.0	4.3	3.1	2.7	2.8	3.0	3.3	3.9	3.4	3.3	2.9	3.4
Miscellaneous Groceries	1.0	0.9	1.1	1.0	0.9	0.9	1.0	0.9	1.1	1.1	1.1	1.0
Canned and Dried Fruit	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Fresh Fruit	1.3	1.6	1.3	1.2	1.3	1.3	1.2	1.4	1.4	1.2	1.2	1.1
Canned and Dried Vegetables	1.6	1.7	1.7	1.6	1.6	1.5	1.4	1.4	1.4	1.3	1.5	1.4
Fresh Vegetables	6.9	6.9	7.5	6.5	6.7	7.2	6.1	6.7	7.0	5.8	6.1	5.6
Frozen Foods	1.2	1.0	1.1	1.1	1.3	1.5	1.6	1.2	1.5	1.7	1.8	1.8

TABLE E.12. AND FIGURE E.12
PERCENTAGE OF ASCORBIC ACID CONTRIBUTED BY
ALL COMMODITY GROUPS: SURVEY DATA



Commodity Group	1969					1974						
	All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile	All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile
Dairy Products	5.1	4.9	5.5	5.8	5.1	4.4	4.6	5.0	4.7	5.0	4.5	4.0
Eggs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bakery Products	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cereal Products	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Meat and Poultry	1.1	1.3	1.2	1.2	0.9	1.1	1.1	1.4	1.4	1.4	0.8	0.9
Fish	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.5	0.2	0.2	0.1	0.1
Fats and Oils	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Beverages	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Miscellaneous Groceries	2.0	1.8	2.3	2.4	2.0	1.8	3.1	2.7	2.9	3.5	3.5	2.9
Canned and Dried Fruit	10.3	9.5	9.0	10.7	11.1	10.7	10.7	9.4	9.3	12.2	10.0	11.3
Fresh Fruit	28.3	32.2	27.4	27.7	27.2	27.3	24.8	27.2	27.4	24.9	23.8	23.3
Canned and Dried Vegetables	5.1	5.0	5.8	5.7	5.3	4.3	4.3	4.5	4.2	4.3	4.5	4.2
Fresh Vegetables	39.4	38.6	42.2	39.4	39.6	38.1	38.0	41.1	40.3	36.5	39.3	35.5
Frozen Foods	8.5	6.5	6.4	6.8	8.6	12.1	13.1	8.1	9.5	11.9	13.4	17.7

TABLE E.13. AND FIGURE E.13



Commodity Group	1969					1974						
	All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile	All	1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile
Dairy Products	10.1	9.0	9.7	10.3	10.1	10.6	9.8	9.2	9.3	10.3	10.1	9.4
Eggs	10.7	11.6	10.5	11.1	10.8	10.0	10.6	9.8	9.3	9.6	9.5	13.2
Bakery Products	23.7	23.6	24.4	24.9	24.2	21.9	21.3	21.5	22.2	22.9	22.0	19.4
Cereal Products	6.0	6.6	5.9	6.8	5.8	5.1	7.6	9.1	7.9	8.0	7.1	6.7
Meat and Poultry	9.9	9.8	10.1	9.9	9.5	10.1	10.0	10.2	10.4	10.6	9.5	9.6
Fish	0.8	0.7	0.8	0.8	0.8	0.8	0.8	1.3	0.7	0.8	0.7	0.6
Fats and Oils	1.2	0.7	1.1	1.5	1.5	1.1	1.6	1.3	1.2	1.9	1.9	1.7
Beverages	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Miscellaneous Groceries	1.2	1.1	1.3	1.3	1.2	1.2	1.4	1.2	1.4	1.4	1.5	1.3
Canned and Dried Fruit	1.2	1.3	1.2	1.2	1.2	1.3	1.2	1.3	1.2	1.2	1.2	1.2
Fresh Fruit	8.5	9.8	8.2	7.9	8.3	8.5	7.7	8.4	8.5	7.6	7.4	7.3
Canned and Dried Vegetables	5.8	5.8	5.9	6.0	6.1	5.6	5.3	5.1	5.3	4.9	5.7	5.3
Fresh Vegetables	16.5	16.5	17.3	14.8	16.0	17.5	16.6	17.7	17.7	15.2	16.9	16.3
Frozen Foods	4.4	3.5	3.6	3.5	4.5	6.3	6.1	3.9	4.9	5.6	6.5	7.9

APPENDIX F

APPROXIMATE CONTRIBUTIONS TO THE TOTAL NUMBER OF CALORIES BY
CARBOHYDRATES, FAT, AND PROTEIN IN FOODS AVAILABLE FOR
CONSUMPTION IN CANADA,
1960–75

Table F.1

TABLE F.1. APPROXIMATE CONTRIBUTION TO THE TOTAL NUMBER OF CALORIES^a BY CARBOHYDRATES, FAT, AND PROTEIN IN FOODS AVAILABLE FOR CONSUMPTION IN CANADA, 1960-75

Year	Food Energy	Carbohydrates		Fat		Protein	
		% total		% total		% total	
	cal	g	cal ^b	g	cal	g	cal ^b
1960	3029	377	50	132	39	89	12
1961	2974	368	49	131	40	88	12
1962	3008	373	50	133	40	87	12
1963	3046	376	49	135	40	89	12
1964	3066	377	49	137	40	89	12
1965	3130	392	50	136	39	92	12
1966	3135	383	49	141	40	91	12
1967	3170	383	48	144	41	92	12
1968	3167	381	48	146	41	91	11
1969	3195	384	48	146	41	93	12
1970	3186	381	48	147	42	91	11
1971	3217	381	47	151	42	91	11
1972	3257	386	47	152	42	93	11
1973	3214	390	49	147	41	92	11
1974	3196	375	47	150	42	94	12
1975	3168	373	47	147	42	95	12

^a Assuming 1 g of carbohydrate, protein, and fat yields, 4, 4, and 9 cal of food energy, respectively (A.L. [Merrill and B.K. Watt, *Energy Values of Foods, Basis and Derivation*).

^b Per person per day, calculated from food disappearance data.

APPENDIX G

ACTUAL AND PERCENTAGE CONTRIBUTIONS TO FOOD ENERGY AND MACRONUTRIENT
INTAKE BY MAJOR FOODS, 1960–75

Tables G.1 – G.8

TABLE G.1. ACTUAL CONTRIBUTION TO FOOD ENERGY BY MAJOR FOODS IN CANADA, 1960-75

Year	Wheat Flour	Sugar	Margarine	Butter	Shortening and Shorte- ning Oil	Potatoes	Beef	Pork	Eggs	Chicken	Fluid Whole Milk	Cheese	Total Food Energy
calories													
1960	610	440	83	151	102	128	242	192	59	27	264	35	3030
1961	605	428	90	147	101	113	244	184	59	30	254	36	2975
1962	599	444	88	159	106	124	246	183	58	30	249	39	3010
1963	624	428	83	170	109	115	257	185	55	32	247	40	3045
1964	569	468	79	169	113	118	275	189	55	34	245	42	3065
1965	639	475	78	165	108	105	289	175	55	36	242	44	3130
1966	589	483	80	158	140	108	291	172	53	39	238	44	3135
1967	584	474	82	147	152	133	288	199	54	41	232	47	3170
1968	586	482	84	147	155	116	295	196	54	41	225	49	3165
1969	605	471	87	140	168	130	300	188	55	47	219	53	3195
1970	596	480	83	137	168	117	292	215	56	50	210	56	3185
1971	561	488	83	139	165	123	309	250	55	48	208	59	3220
1972	592	487	87	133	182	124	320	223	53	50	210	62	3255
1973	587	515	88	121	192	118	288	211	50	53	210	68	3215
1974	598	437	96	118	187	112	297	217	49	50	209	73	3195
1975	614	418	04	106	191	118	320	186	48	48	196	73	3170

TABLE G.2. PERCENTAGE CONTRIBUTION TO FOOD ENERGY BY MAJOR FOODS IN CANADA, 1960-75

Year	Wheat Flour	Sugar	Margarine	Butter	Shortening and Shorte- ning Oil	Potatoes	Beef	Pork	Eggs	Chicken	Fluid Whole Milk	Cheese	
percent													
1960	20	15	3	5	3	4	8	6	2	1	9	1	
1961	20	14	3	5	3	4	8	6	2	1	9	1	
1962	20	15	3	5	4	4	8	6	2	1	8	1	
1963	20	14	3	6	4	4	8	6	2	1	8	1	
1964	19	15	3	6	4	4	9	6	2	1	8	1	
1965	20	15	2	5	3	3	9	6	2	1	8	1	
1966	19	15	3	5	4	3	9	5	2	1	8	1	
1967	18	15	3	5	5	4	9	6	2	1	7	1	
1968	19	15	3	5	5	4	9	6	2	1	7	2	
1969	19	15	3	4	5	4	9	6	2	1	7	2	
1970	19	15	3	4	5	4	9	7	2	2	7	2	
1971	17	15	3	4	5	4	10	8	2	1	6	2	
1972	18	15	3	4	6	4	10	7	2	2	6	2	
1973	18	16	3	4	6	4	9	7	2	2	7	2	
1974	19	14	3	4	6	4	9	7	2	2	7	2	
1975	19	13	3	3	6	4	10	6	2	2	6	2	

TABLE G.3. ACTUAL CONTRIBUTION TO PROTEIN BY MAJOR FOODS IN CANADA, 1960-75

Year	Wheat Flour	Sugar	Margarine	Butter	Shortening and Shorte- ning Oil	Potatoes	Beef	Pork	Eggs	Chicken	Fluid Whole Milk	Cheese	Total Protein
gram													
1960	18	0	0	0	0	4	12	6	5	3	14	2	89
1961	17	0	0	0	0	3	12	6	5	3	14	2	88
1962	17	0	0	0	0	3	12	5	4	3	13	2	87
1963	18	0	0	0	0	3	13	5	4	3	13	3	89
1964	16	0	0	0	0	3	13	6	4	3	13	3	89
1965	18	0	0	0	0	3	14	5	4	4	13	3	92
1966	17	0	0	0	0	3	14	5	4	4	13	3	91
1967	17	0	0	0	0	4	14	6	4	4	12	3	92
1968	17	0	0	0	0	3	14	6	4	4	12	3	91
1969	17	0	0	0	0	4	15	6	4	5	12	3	93
1970	17	0	0	0	0	3	14	6	4	5	11	4	91
1971	16	0	0	0	0	3	15	7	4	5	11	4	91
1972	17	0	0	0	0	3	16	7	4	5	11	4	93
1973	17	0	0	0	0	3	16	6	4	5	11	4	92
1974	17	0	0	0	0	3	17	6	4	5	11	5	94
1975	18	0	0	0	0	3	18	6	4	5	10	5	95

TABLE G.4. PERCENTAGE CONTRIBUTION TO PROTEIN BY MAJOR FOODS IN CANADA, 1960-75

Year	Wheat ^a Flour	Sugar	Margarine	Butter	Shortening and Shorte- ning Oil	Potatoes	Beef	Pork	Eggs	Chicken	Fluid Whole Milk	Cheese	
percent													
1960	20	0	0	0	0	4	13	7	6	3	16	2	
1961	19	0	0	0	0	3	14	7	6	3	16	2	
1962	20	0	0	0	0	3	14	6	5	3	15	2	
1963	20	0	0	0	0	3	15	6	4	3	15	3	
1964	18	0	0	0	0	3	15	7	4	3	15	3	
1965	20	0	0	0	0	3	15	5	4	4	14	3	
1966	19	0	0	0	0	3	15	5	4	4	14	3	
1967	18	0	0	0	0	4	15	7	4	4	13	3	
1968	19	0	0	0	0	3	15	7	4	4	13	3	
1969	18	0	0	0	0	4	16	6	4	5	13	3	
1970	19	0	0	0	0	3	15	7	4	5	12	4	
1971	18	0	0	0	0	3	16	8	4	5	12	4	
1972	18	0	0	0	0	3	17	8	4	5	12	4	
1973	18	0	0	0	0	3	17	7	4	5	12	4	
1974	18	0	0	0	0	3	18	6	4	5	12	5	
1975	19	0	0	0	0	3	19	6	4	5	11	5	

TABLE G.5. ACTUAL CONTRIBUTION TO FAT BY MAJOR FOODS IN CANADA, 1960-75

Year	Wheat Flour	Sugar	Margarine	Butter	Shortening and Shorte- ning Oil	Potatoes	Beef	Pork	Eggs	Chicken	Fluid Whole Milk	Cheese	Total Fat
grams													
1960	2	0	9	17	12	0	21	19	4	2	14	3	132
1961	2	0	10	17	11	0	21	18	4	2	14	3	131
1962	2	0	10	18	12	0	22	18	4	2	14	3	133
1963	2	0	9	19	12	0	23	18	4	2	13	3	135
1964	2	0	9	19	13	0	24	18	4	2	13	3	137
1965	2	0	9	19	12	0	25	17	4	2	13	4	136
1966	2	0	9	18	16	0	26	17	4	2	13	4	141
1967	2	0	9	17	17	0	25	19	4	3	13	4	144
1968	2	0	10	17	18	0	26	19	4	3	12	4	146
1969	2	0	10	16	19	0	26	18	4	3	12	4	146
1970	2	0	9	16	19	0	26	21	4	3	11	5	147
1971	2	0	9	16	19	0	27	24	4	3	11	5	151
1972	2	0	10	15	21	0	28	22	4	3	11	5	152
1973	2	0	10	14	22	0	24	20	4	3	11	6	147
1974	2	0	11	13	21	0	25	21	3	3	11	6	150
1975	2	0	12	12	22	0	27	18	3	3	11	6	147

TABLE G.6. PERCENTAGE CONTRIBUTION TO TOTAL FAT BY MAJOR FOODS IN CANADA, 1960-1975

Year	Wheat Flour	Sugar	Margarine	Butter	Shortening and Shorte- ning Oil	Potatoes	Beef	Pork	Eggs	Chicken	Fluid Whole Milk	Cheese	
percent													
1960	2	0	7	13	9	0	16	14	3	2	11	2	
1961	2	0	8	13	8	0	16	14	3	2	11	2	
1962	2	0	8	14	9	0	17	14	3	2	11	2	
1963	1	0	7	14	9	0	17	13	3	1	10	2	
1964	1	0	7	14	9	0	18	13	3	1	9	2	
1965	1	0	7	14	9	0	18	13	3	1	10	3	
1966	1	0	6	13	11	0	18	12	3	1	9	3	
1967	1	0	6	12	12	0	17	13	3	2	9	3	
1968	1	0	7	12	12	0	18	13	3	2	8	3	
1969	1	0	7	11	13	0	18	12	3	2	8	3	
1970	1	0	6	11	13	0	18	14	3	2	7	3	
1971	1	0	6	11	13	0	18	16	3	2	7	3	
1972	1	0	7	10	14	0	18	14	3	2	7	3	
1973	1	0	7	10	15	0	16	14	3	2	7	4	
1974	1	0	7	9	14	0	17	14	2	2	7	4	
1975	1	0	8	8	15	0	18	12	2	2	7	4	

TABLE G.7. ACTUAL CONTRIBUTION TO CARBOHYDRATES BY MAJOR FOODS IN CANADA, 1960-75

Year	Wheat Flour	Sugar	Margarine	Butter	Shortening and Shorte- ning Oil	Potatoes	Beef	Pork	Eggs	Chicken	Fluid Whole Milk	Cheese	Total Carbo- hydrates
grams													
1960	128	114	0	0	0	29	0	0	0	0	20	0	377
1961	127	111	0	0	0	25	0	0	0	0	19	0	368
1962	125	115	0	0	0	28	0	0	0	0	19	0	373
1963	130	111	0	0	0	26	0	0	0	0	19	0	376
1964	119	121	0	0	0	27	0	0	0	0	19	0	377
1965	134	123	0	0	0	24	0	0	0	0	18	0	392
1966	123	125	0	0	0	24	0	0	0	0	18	0	383
1967	122	122	0	0	0	30	0	0	0	0	18	0	383
1968	122	125	0	0	0	26	0	0	0	0	17	0	381
1969	127	122	0	0	0	29	0	0	0	0	17	0	384
1970	125	124	0	0	0	26	0	0	0	0	16	0	381
1971	117	126	0	0	0	28	0	0	0	0	16	0	381
1972	124	126	0	0	0	28	0	0	0	0	16	0	386
1973	123	133	0	0	0	26	0	0	0	0	16	0	390
1974	125	113	0	0	0	25	0	0	0	0	16	0	375
1975	128	108	0	0	0	27	0	0	0	0	15	0	373

TABLE G.8. PERCENTAGE CONTRIBUTION TO CARBOHYDRATES BY MAJOR FOODS IN CANADA, 1960-75

Year	Wheat Flour	Sugar	Margarine	Butter	Shortening and Shorte- ning Oil	Potatoes	Beef	Pork	Eggs	Chicken	Fluid Whole Milk	Cheese
percent												
1960	34	30	0	0	0	8	0	0	0	0	5	0
1961	35	30	0	0	0	7	0	0	0	0	5	0
1962	34	31	0	0	0	8	0	0	0	0	5	0
1963	35	30	0	0	0	7	0	0	0	0	5	0
1964	32	32	0	0	0	7	0	0	0	0	5	0
1965	34	31	0	0	0	6	0	0	0	0	5	0
1966	32	33	0	0	0	6	0	0	0	0	5	0
1967	32	32	0	0	0	8	0	0	0	0	5	0
1968	32	33	0	0	0	7	0	0	0	0	4	0
1969	33	32	0	0	0	8	0	0	0	0	4	0
1970	33	33	0	0	0	7	0	0	0	0	4	0
1971	31	33	0	0	0	7	0	0	0	0	4	0
1972	32	33	0	0	0	7	0	0	0	0	4	0
1973	32	34	0	0	0	7	0	0	0	0	4	0
1974	33	30	0	0	0	7	0	0	0	0	4	0
1975	34	29	0	0	0	7	0	0	0	0	4	0

APPENDIX H

PER-CAPITA DOMESTIC DISAPPEARANCE OF MEAT, FRUIT, AND VEGETABLES IN CANADA, 1960–75

Tables H.1 – H.4

TABLE H.1. PER-CAPITA DOMESTIC DISAPPEARANCE^a OF MEAT^b AND POULTRY,^c 1960-75

Food Type	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
	kg															
Pork	23.80	22.82	22.71	23.00	23.49	21.71	21.31	24.73	24.26	23.32	26.65	29.47	28.63	26.88	28.18	24.18
Beef	31.66	32.00	32.25	33.71	36.01	37.91	38.11	37.72	38.62	38.85	38.29	40.18	42.77	42.05	43.67	48.53
Veal	3.12	3.09	3.22	2.97	3.26	3.75	3.15	3.18	3.08	2.30	2.06	2.01	1.66	1.56	1.60	2.38
Mutton and Lamb	1.33	1.60	1.72	1.80	1.53	1.29	1.76	1.89	2.22	2.28	2.06	1.47	2.09	1.64	1.12	1.38
Offal	2.15	2.05	1.95	1.83	1.76	1.62	1.65	1.78	1.68	1.72	1.55	1.94	1.92	1.77	1.69	1.69
Canned ^d Meat	3.38	2.46	2.39	2.36	2.48	2.46	2.50	2.83	3.00	3.43	3.59	—	—	—	—	—
Chicken	—	—	—	8.90	9.64	10.02	10.91	11.68	11.63	13.32	14.21	13.21	13.91	14.59	13.94	13.22
Fowl	—	—	—	2.07	2.12	2.04	2.02	1.87	1.77	1.50	1.50	1.62	1.32	1.43	1.40	1.29
Turkey	2.88	3.45	3.47	3.76	3.91	4.29	4.68	4.71	4.42	4.53	4.56	4.64	4.67	4.57	4.72	4.26
Duck	0.15	0.13	0.14	0.14	0.15	0.16	0.15	0.15	0.14	0.13	0.14	0.17	0.18	0.17	0.17	0.20
Goose	0.07	0.07	0.06	0.07	0.08	0.08	0.08	0.09	0.08	0.07	0.07	0.09	0.08	0.09	0.07	0.03

^a Revised series.^b Cold dressed carcass weight basis.^c Eviscerated weight.^d Cold dressed carcass and offal equivalent.Sources: Statistics Canada, *Livestock and Animal Products Statistics* and Statistics Canada, *Production of Poultry and Eggs*.TABLE H.2. PER-CAPITA DOMESTIC DISAPPEARANCE^a OF TOMATOES,^b 1960-75

Food Type	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
	kg															
Tomatoes, Fresh	7.98	8.07	7.62	6.08	6.08	5.67	5.87	5.76	5.27	5.43	5.80	5.08	4.99	5.60	5.06	5.14
Tomatoes, Canned	2.54	3.02	2.64	2.90	2.54	2.58	2.76	2.27	2.59	2.63	2.77	2.70	2.79	3.21	3.23	2.48
Tomato Juice	4.47	4.57	5.16	5.08	4.38	4.26	4.67	3.79	4.13	3.73	3.64	3.83	3.52	3.86	4.04	4.06
Pulp, Paste, and Purée	0.67	0.44	0.70	0.87	—	—	—	1.26	—	1.12	—	—	—	1.71	—	0.80
Catsup	1.35	1.34	1.28	1.49	1.35	1.81	1.75	1.66	1.89	1.86	1.88	1.86	2.00	1.98	2.32	2.35
Tomatoes Other-wise Used	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

^a Revised series.^b Retail weight.Source: Statistics Canada, *Apparent Per Capita Domestic Disappearance of Foods in Canada*.

TABLE H.3. PER-CAPITA DOMESTIC DISAPPEARANCE^a OF FRUITS,^b 1960-75

Food Type	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
								kg								
Grapefruit, Fresh	3.24	3.86	3.66	2.58	2.76	3.34	3.11	3.91	3.26	4.30	4.16	3.90	3.87	3.91	3.90	3.63
Grapefruit Juice	0.67	0.71	0.68	0.53	0.35	0.42	0.40	0.60	0.49	0.68	0.66	0.56	0.56	0.71	0.66	0.62
Oranges, Fresh	10.07	9.25	8.75	7.37	8.89	8.85	9.09	9.53	8.14	9.27	9.15	8.98	9.27	9.21	9.19	10.07
Orange Juice	4.60	4.32	4.53	3.67	3.36	3.17	3.66	4.40	4.33	4.35	4.22	5.52	5.95	6.93	7.35	9.15
Orange and Grapefruit Juice	—	—	—	—	—	—	—	—	—	1.23	1.18	0.84	0.78	0.77	0.83	0.09
Lemons, Fresh	0.78	0.78	0.77	0.76	0.72	0.73	0.71	0.75	0.72	0.75	0.74	0.71	0.73	0.74	0.73	0.80
Lemon Juice	0.63	0.69	0.63	0.49	0.32	0.20	0.22	0.22	0.21	0.26	0.27	0.29	0.24	0.19	0.20	0.24
Apples, Fresh	8.71	8.62	13.04	13.72	12.72	12.29	10.69	9.64	12.19	12.52	11.44	11.90	10.54	11.08	13.43	11.77
Apples, Canned	0.27	0.48	0.24	0.29	0.17	0.31	0.23	0.22	0.22	0.24	0.15	0.19	0.10	0.07	0.06	0.16
Apple Juice	2.15	1.63	2.32	3.03	3.28	2.86	3.48	3.29	2.74	3.04	3.03	2.81	2.49	2.70	2.30	4.25
Apples, Frozen	0.06	0.09	0.10	0.12	0.11	0.22	0.18	0.19	0.14	0.14	0.19	0.11	0.19	0.19	0.06	0.15
Apples, Dried	0.03	0.02	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02
Applesauce	0.37	0.30	0.36	0.41	0.46	0.51	0.56	0.63	0.58	0.60	0.50	0.56	0.59	0.62	0.71	0.45
Apple Pie Filling	0.22	0.27	0.20	0.25	0.22	0.27	0.30	0.29	0.24	0.21	0.19	0.24	0.22	0.16	0.22	0.19
Apples Otherwise Used	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apricots, Fresh	0.21	0.24	—	—	0.24	0.08	0.19	0.11	0.11	0.04	0.12	0.11	0.10	0.14	0.09	0.11
Apricots, Canned	0.25	0.25	0.25	0.26	0.27	0.31	0.32	0.27	0.26	0.22	0.22	0.24	0.21	0.20	0.10	0.15
Apricots, Frozen	0.00	0.00	0.00	0.00	0.00	—	0.01	0.00	0.01	0.00	0.00	—	—	—	0.00	—
Bananas, Fresh	9.43	8.87	8.17	7.92	8.11	8.49	8.72	8.91	9.38	9.17	9.35	9.60	9.49	9.73	9.85	9.34
Blueberries, Fresh	0.15	0.17	0.17	0.20	0.18	0.12	0.22	0.30	0.17	0.29	0.22	0.16	0.26	0.27	0.17	0.43
Blueberries, Canned	0.03	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	—	—	—
Blueberries, Frozen	0.00	0.00	0.00	0.00	0.02	0.04	0.08	—	—	0.00	0.08	0.05	0.00	—	0.04	—
Cherries, Fresh	0.25	0.38	0.43	0.43	0.69	0.26	0.38	0.44	0.36	0.34	0.38	0.56	0.47	0.61	0.66	0.72
Cherries, Canned	0.21	0.26	0.26	0.20	0.19	0.22	0.16	0.15	0.15	0.14	0.15	0.14	0.11	0.10	0.10	0.16
Cherries, Frozen	0.22	0.20	0.26	0.28	0.31	0.34	0.29	0.24	0.24	0.21	0.28	0.26	0.29	0.26	0.24	0.19
Cranberries, Fresh	0.11	0.12	0.11	0.12	0.15	0.12	0.11	0.06	0.06	—	0.14	0.25	0.20	0.24	0.22	0.31
Grapes, Fresh	4.39	4.11	4.37	4.40	4.67	5.95	5.42	5.36	5.15	5.34	4.32	4.99	4.05	4.79	5.39	5.43
Grape Juice	0.09	0.08	0.04	0.00	0.00	—	—	—	—	0.12	0.17	0.51	0.25	1.00	0.88	0.18
Melons, Fresh	4.41	3.25	3.02	3.29	3.15	3.34	3.08	3.59	3.48	3.59	4.13	3.77	3.71	3.79	3.68	3.88
Peaches, Fresh	2.44	2.72	2.03	2.27	2.32	1.90	2.10	1.76	2.25	2.29	2.51	2.78	2.18	2.41	2.79	3.07
Peaches, Canned	1.85	1.85	1.78	1.89	1.87	1.95	1.90	1.78	1.66	1.73	1.34	1.69	1.52	1.75	1.46	1.50
Peaches, Frozen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00
Pears, Fresh	1.30	1.37	1.37	1.22	1.38	0.97	1.47	1.27	1.32	1.40	1.38	1.52	1.68	1.91	1.59	1.79
Pears, Canned	0.76	0.88	0.94	0.88	0.92	0.97	0.92	0.85	0.84	0.82	0.80	0.84	0.82	1.00	0.85	0.64
Pineapple, Fresh	0.19	0.20	0.16	0.09	0.13	0.14	0.12	0.12	0.10	0.14	0.15	0.16	0.16	0.24	0.23	0.30
Pineapple, Canned	0.98	0.93	0.93	1.04	1.12	1.07	0.98	1.32	0.96	1.06	0.95	1.31	1.12	1.17	0.85	1.12
Pineapple Juice	0.42	0.37	0.52	0.54	0.35	0.38	0.39	0.59	0.46	0.52	0.46	0.34	0.43	0.48	0.44	0.41
Plums, Fresh	0.80	0.88	0.73	0.98	0.99	0.75	0.80	0.77	0.80	0.63	0.94	0.85	0.85	0.85	1.03	1.01
Plums, Canned	0.21	0.21	0.21	0.20	0.21	0.20	0.20	0.19	0.20	0.16	0.15	0.12	0.11	0.14	0.13	0.10
Plums, Frozen	0.00	0.00	0.00	0.01	0.00	0.01	0.03	0.01	0.01	0.01	0.01	0.02	—	0.00	—	0.02

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TABLE H.3. PER-CAPITA DOMESTIC DISAPPEARANCE^a OF FRUITS,^b 1960-75 (concluded)

Food Type	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
	kg															
Raspberries, Fresh	0.16	0.08	0.03	0.04	0.04	—	0.34	0.26	0.24	0.25	0.24	0.22	0.22	0.20	0.19	0.24
Raspberries, Canned	0.10	0.10	0.09	0.07	0.07	0.08	0.08	0.10	0.06	0.05	0.04	0.04	0.03	0.03	0.03	0.03
Raspberries, Frozen	0.24	0.21	0.14	0.21	0.23	0.26	0.24	0.32	0.28	0.24	0.18	0.24	0.18	0.17	0.25	0.24
Strawberries, Fresh	0.77	0.80	0.66	0.67	0.66	0.49	0.73	0.75	0.86	0.86	0.77	0.88	0.82	0.85	0.92	1.04
Strawberries, Canned	0.08	0.07	0.07	0.07	0.09	0.06	0.07	0.06	0.07	0.06	0.05	0.05	0.04	0.03	0.03	0.04
Strawberries, Frozen	0.40	0.47	0.49	0.56	0.54	0.71	0.56	0.70	0.56	0.62	0.67	0.68	0.64	0.64	0.65	0.72
Unspecified																
Canned Fruit	1.44	1.46	1.35	1.36	1.36	1.82	1.86	1.44	2.10	1.71	1.71	1.51	1.66	1.67	1.72	1.26
Jams, Jellies,																
Marmalade	2.91	2.93	2.96	2.88	2.84	3.02	2.83	2.74	2.43	2.43	2.25	2.25	2.18	2.10	2.10	1.95

Source: Statistics Canada, *Apparent Per Capita Domestic Disappearance of Foods in Canada*.^a Revised series.^b Retail weight.TABLE H.4. PER-CAPITA DISAPPEARANCE^a OF VEGETABLES,^b 1960-75

Food Type	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
	kg															
Cabbage, Fresh	4.41	4.30	3.90	4.68	4.33	4.30	4.34	4.41	4.59	4.31	4.54	4.72	4.46	4.90	5.18	4.41
Lettuce, Fresh	5.14	5.16	5.51	5.41	5.65	5.78	5.59	6.20	6.28	6.08	6.82	6.62	6.81	7.33	7.84	8.30
Spinach, Fresh	0.39	0.39	0.35	0.30	0.29	0.33	0.29	—	0.24	0.24	0.23	0.27	0.30	0.27	0.30	0.28
Spinach, Canned	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	—	—	—	—
Spinach, Frozen	0.00	0.00	0.00	0.04	0.03	0.03	0.02	0.03	0.04	0.05	0.05	0.05	0.06	0.06	0.07	0.05
Asparagus, Fresh	0.16	0.16	0.14	0.13	0.10	0.11	0.10	0.10	0.23	0.09	0.12	0.10	0.11	0.14	0.12	0.15
Asparagus, Canned	0.17	0.17	0.17	0.16	0.16	0.20	0.19	0.19	0.17	0.17	0.19	0.21	0.22	0.24	0.23	0.20
Asparagus, Frozen	0.00	0.01	0.01	0.01	0.02	0.01	0.02	0.01	0.00	0.00	0.00	0.02	0.02	0.01	0.01	0.00
Beans, Green and																
Wax, Fresh	—	0.56	0.51	0.55	0.46	0.84	0.61	0.49	0.52	0.61	0.44	0.49	0.64	0.63	0.53	0.49
Beans, Canned	1.47	1.48	1.58	1.49	1.45	1.51	1.72	1.76	1.65	1.80	1.61	1.77	1.56	1.69	1.68	1.48
Beans, Frozen	0.10	0.14	0.25	0.33	0.25	0.37	0.28	0.30	0.28	0.31	0.34	0.38	0.35	0.33	0.39	0.32
Lima Beans, Frozen	0.00	0.01	0.01	0.05	0.03	0.01	—	0.05	—	0.03	0.01	0.03	0.02	—	0.01	0.00
Beets, Fresh	0.61	0.78	0.83	0.59	0.63	0.40	0.42	0.24	0.29	0.30	0.28	0.36	0.15	0.12	0.13	0.21
Beets, Canned	0.29	0.30	0.29	0.33	0.37	0.37	0.47	0.32	0.38	0.35	0.37	0.36	0.38	0.36	0.34	0.28
Broccoli, Fresh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.26	0.24	0.26	0.34	0.41	0.50	0.51	0.63
Broccoli, Frozen	0.00	0.00	0.02	0.05	0.05	0.04	0.06	0.07	0.07	0.10	0.13	0.09	0.12	0.14	0.15	0.11
Brussels Sprouts, Fresh	0.00	0.11	0.10	0.10	0.13	0.05	0.10	0.07	0.10	0.08	0.08	0.07	0.08	0.10	0.08	0.10
Brussels Sprouts, Frozen	0.00	0.00	0.00	0.04	0.06	0.03	0.03	0.03	0.07	0.05	0.08	0.08	0.08	0.09	0.07	0.09
Carrots, Fresh	8.08	6.29	7.48	6.87	6.72	6.07	6.66	6.63	5.42	6.59	6.70	6.07	5.72	5.46	6.51	7.89
Carrots, Canned	0.24	0.22	0.37	0.12	0.34	0.37	0.39	0.40	0.44	0.28	0.39	0.47	0.46	0.58	0.50	0.44
Carrots, Frozen	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.19	0.17	0.23	0.26	0.30	0.35	0.49	0.49

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TABLE H.4. PER-CAPITA DISAPPEARANCE^a OF VEGETABLES,^b 1960-75 (concluded)

Food Type	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
	kg															
Cauliflower, Fresh	0.96	0.96	1.01	0.93	0.88	0.91	0.73	0.80	0.81	0.94	0.95	0.82	0.83	0.82	0.87	0.98
Cauliflower, Frozen	0.00	0.00	0.00	0.00	0.00	—	—	0.00	—	0.05	0.08	0.05	0.04	0.05	0.05	0.06
Celery, Fresh	3.23	3.35	2.98	3.17	3.04	3.08	2.94	3.22	3.22	3.13	3.15	3.37	3.09	3.41	3.35	3.60
Corn, Fresh	1.43	2.05	1.86	3.30	1.88	1.87	1.93	1.76	2.35	2.06	2.65	1.65	0.79	2.03	1.66	1.98
Corn, Canned	2.23	2.12	2.37	2.30	2.15	2.36	2.49	2.20	2.59	2.19	1.94	2.20	2.22	2.46	2.48	2.32
Corn, Frozen	0.19	0.26	0.25	0.28	0.29	0.35	0.37	0.30	0.44	0.29	0.37	0.36	0.39	0.36	0.25	0.20
Cucumbers, Fresh	—	1.15	0.81	0.85	0.91	0.65	0.84	0.48	1.19	1.33	1.37	1.23	0.80	1.26	1.52	1.32
Onions, Not Processed	5.07	4.88	5.51	5.35	4.77	5.55	5.38	5.10	5.56	5.70	5.01	5.48	5.04	5.36	5.69	6.13
Parsnips, Fresh	0.28	0.32	0.32	0.30	0.22	0.30	0.23	0.18	0.28	0.20	0.18	0.24	0.17	0.16	0.13	0.15
Peas, Fresh	0.06	0.01	0.10	0.03	0.03	0.08	0.02	0.02	0.02	0.03	0.09	0.16	0.20	0.38	0.02	0.05
Peas, Canned	2.76	2.62	2.87	2.61	2.75	2.71	2.76	2.76	2.89	2.11	2.18	2.32	2.26	2.13	2.13	1.87
Peas, Frozen	0.82	0.87	0.62	0.84	0.89	0.98	1.05	1.05	1.18	1.06	1.09	1.03	1.08	1.14	1.14	1.11
Peppers, Fresh	0.11	0.48	0.51	0.58	0.47	0.52	0.56	0.73	0.78	0.90	0.73	0.79	1.02	0.96	0.95	1.16
Pumpkin and Squash, Canned	0.15	0.19	0.18	0.18	0.15	0.16	0.11	0.00	0.00	—	0.12	0.15	0.00	0.15	0.09	0.08
Radishes, Fresh	0.20	0.27	0.23	0.19	0.21	0.06	0.06	0.29	0.34	0.36	0.39	0.43	0.44	0.53	0.64	0.59
Rutabagas, Fresh	—	—	2.12	2.43	3.03	3.09	2.51	1.93	2.80	1.58	3.34	1.96	2.09	2.20	2.48	2.35
Unspecified Canned Vegetables	0.53	0.69	0.53	0.51	0.61	0.77	0.56	0.00	0.00	0.00	1.08	1.17	1.06	1.23	1.26	0.47

Source: Statistics Canada, *Apparent Per Capita Domestic Disappearance of Foods in Canada*.^a Revised series.^b Retail weight.

APPENDIX I

PER-CAPITA WEEKLY FOOD PURCHASES BY FAMILY INCOME QUINTILE GROUP, CANADA, 1969 AND 1974

Table I.1

TABLE I.1. PER-CAPITA WEEKLY FOOD PURCHASES BY FAMILY INCOME QUINTILE GROUP, CANADA, 1969 AND 1974 (continued)

Commodity	1969					1974					Family Income Quintile Group				
	All	1st	2nd	3rd	4th	5th	All	1st	2nd	3rd	4th	5th	Family Income Quintile Group		
						kg/week									
<i>Cereal Products</i>															
Baby Cereal	0.002	0.001	0.004	0.003	0.001	0.001	0.002	0.000	0.004	0.002	0.001	0.001			
Breakfast Cereal Prepared	0.045	0.044	0.038	0.047	0.047	0.046	0.054	0.056	0.053	0.051	0.058	0.056			
Breakfast Cereal to be Cooked	0.019	0.026	0.018	0.023	0.017	0.017	0.017	0.029	0.017	0.016	0.014	0.015			
Flour	0.086	0.099	0.083	0.097	0.090	0.069	0.094	0.112	0.106	0.092	0.089	0.077			
Mixes — Cake, Pastry	0.019	0.010	0.017	0.020	0.021	0.019	0.023	0.017	0.019	0.023	0.029	0.023			
Other Mixes — Pancake, Pudding, etc.	0.008	0.006	0.005	0.009	0.008	0.009	0.005	0.006	0.004	0.006	0.006	0.005			
Pasta Products — Macaroni, Spaghetti	0.044	0.040	0.049	0.048	0.045	0.033	0.060	0.060	0.069	0.072	0.053	0.051			
Rice	0.000	0.000	0.000	0.000	0.000	0.000	0.046	0.071	0.039	0.049	0.038	0.051			
Other Cereals	0.030	0.023	0.031	0.049	0.019	0.023	0.009	0.012	0.009	0.009	0.009	0.008			
<i>Meat and Poultry</i>															
Beef															
Loin Cuts	0.093	0.075	0.084	0.088	0.104	0.100	0.075	0.049	0.067	0.071	0.083	0.083			
Round or Rump Cuts	0.075	0.075	0.080	0.065	0.081	0.076	0.092	0.081	0.072	0.081	0.102	0.108			
Rib Cuts	0.053	0.036	0.041	0.045	0.058	0.067	0.054	0.045	0.049	0.045	0.055	0.060			
Shoulder Cuts	0.045	0.035	0.047	0.046	0.044	0.049	0.053	0.046	0.053	0.048	0.052	0.054			
Brisket, Flank	0.010	0.016	0.010	0.009	0.007	0.007	0.014	0.016	0.015	0.014	0.016	0.013			
Stewing Beef	0.015	0.022	0.016	0.017	0.014	0.013	0.032	0.029	0.029	0.028	0.034	0.034			
Hamburger, Minced Beef	0.138	0.139	0.138	0.149	0.141	0.131	0.172	0.183	0.168	0.168	0.171	0.165			
Other Beef	0.022	0.019	0.018	0.015	0.035	0.014	0.017	0.013	0.012	0.017	0.018	0.018			
Unspecified Beef	0.099	0.057	0.076	0.109	0.147	0.078	0.013	0.008	0.011	0.017	0.013	0.015			
Pork															
Bacon	0.055	0.052	0.048	0.057	0.061	0.055	0.047	0.054	0.047	0.043	0.045	0.048			
Ham Smoked, Cooked and Uncooked	0.058	0.061	0.053	0.053	0.063	0.061	0.043	0.044	0.040	0.036	0.048	0.048			
Cottage Roll, Smoked Picnic	0.011	0.007	0.009	0.009	0.015	0.011	0.011	0.014	0.010	0.011	0.012	0.008			
Ham, Fresh	0.006	0.004	0.005	0.006	0.005	0.006	0.017	0.015	0.018	0.015	0.016	0.021			
Loin, Fresh	0.070	0.063	0.075	0.075	0.070	0.066	0.079	0.069	0.085	0.076	0.084	0.082			
Shoulder, Fresh	0.022	0.017	0.024	0.021	0.024	0.021	0.035	0.034	0.037	0.027	0.035	0.041			
Sausage	0.034	0.037	0.036	0.041	0.032	0.028	0.028	0.035	0.028	0.022	0.032	0.026			
Other Pork	0.024	0.021	0.019	0.027	0.025	0.024	0.039	0.034	0.034	0.035	0.040	0.049			
Unspecified Pork	0.024	0.012	0.042	0.011	0.019	0.038	0.005	0.006	0.004	0.004	0.006	0.003			
Other Meats															
Veal	0.027	0.015	0.032	0.038	0.014	0.031	0.017	0.013	0.014	0.017	0.014	0.020			
Lamb and Mutton	0.018	0.015	0.014	0.014	0.019	0.024	0.011	0.014	0.010	0.008	0.011	0.013			
Liver — All Kinds (except chicken)	0.017	0.019	0.018	0.018	0.013	0.017	0.014	0.018	0.019	0.015	0.010	0.012			
Bologna	0.019	0.026	0.021	0.022	0.018	0.016	0.016	0.017	0.020	0.017	0.015	0.012			
Wieners	0.034	0.022	0.031	0.042	0.036	0.034	0.034	0.030	0.036	0.034	0.036	0.032			

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TABLE I.1. PER-CAPITA WEEKLY FOOD PURCHASES BY FAMILY INCOME QUINTILE GROUP, CANADA, 1969 AND 1974 (continued)

Commodity	1969					1974					Family Income Quintile Group				
	All	1st	2nd	3rd	4th	5th	All	1st	2nd	3rd	4th	5th	Family Income Quintile Group		
						kg/week									
Other Cooked Meats	0.032	0.032	0.032	0.043	0.032	0.025	0.059	0.058	0.053	0.058	0.073	0.055			
Canned Meats	0.015	0.017	0.018	0.018	0.018	0.009	0.009	0.010	0.009	0.010	0.009	0.009			
Other — Heart, Game, Kidney, etc.	0.010	0.014	0.009	0.008	0.008	0.012	0.016	0.023	0.016	0.024	0.013	0.012			
Packaged Sliced Meats	0.014	0.017	0.009	0.014	0.015	0.015	0.007	0.007	0.004	0.008	0.007	0.008			
Poultry															
Chicken, Fresh, Frozen, Cut Up	0.201	0.218	0.203	0.191	0.191	0.201	0.187	0.244	0.182	0.191	0.172	0.178			
Turkey, Fresh, Frozen, Cut Up	0.068	0.041	0.068	0.068	0.072	0.079	0.074	0.050	0.070	0.059	0.082	0.093			
Other Poultry	0.015	0.017	0.013	0.021	0.008	0.015	0.014	0.026	0.009	0.009	0.017	0.014			
Fish															
Cod, Fresh, Frozen, Smoked	0.008	0.010	0.009	0.009	0.007	0.007	0.005	0.009	0.007	0.005	0.004	0.004			
Halibut, Fresh, Frozen	0.001	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000			
Salmon, Fresh, Frozen, Smoked	0.004	0.003	0.003	0.004	0.004	0.004	0.005	0.019	0.003	0.004	0.004	0.004			
Canned Salmon	0.012	0.009	0.010	0.013	0.013	0.017	0.009	0.009	0.007	0.007	0.009	0.010			
Canned Tuna	0.005	0.004	0.005	0.005	0.005	0.007	0.009	0.006	0.008	0.009	0.009	0.009			
Other Canned Fish and Seafood	0.008	0.009	0.008	0.008	0.008	0.009	0.007	0.009	0.006	0.008	0.007	0.007			
Other Fish and Seafood	0.001	0.002	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001			
Unspecified Fish	0.005	0.004	0.005	0.004	0.000	0.005	0.008	0.017	0.009	0.007	0.004	0.007			
Fats and Oils															
Margarine	0.059	0.070	0.079	0.060	0.054	0.045	0.080	0.104	0.082	0.079	0.084	0.069			
Vegetable Shortening	0.011	0.010	0.014	0.012	0.012	0.007	0.011	0.009	0.014	0.011	0.013	0.008			
Butter Spread,															
Low Fat Margarine Spread	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Lard	0.007	0.007	0.005	0.011	0.007	0.006	0.006	0.006	0.011	0.008	0.006	0.003			
Oil — Corn, Peanut, Olive, etc.	0.026	0.042	0.023	0.025	0.024	0.023	0.055	0.047	0.058	0.067	0.049	0.054			
Salad Dressing, and Mayonnaise	0.019	0.012	0.016	0.021	0.018	0.024	0.023	0.019	0.018	0.022	0.023	0.028			
Peanut Butter	0.018	0.010	0.015	0.023	0.023	0.016	0.023	0.019	0.017	0.026	0.027	0.024			
Other Fats and Oils	0.001	0.000	0.001	0.001	0.002	0.001	0.000	0.000	0.002	0.000	0.000	0.000			
Beverages															
Coffee, Regular	0.026	0.026	0.023	0.023	0.026	0.030	0.024	0.025	0.022	0.023	0.023	0.028			
Coffee, Instant	0.010	0.018	0.011	0.009	0.009	0.008	0.011	0.016	0.013	0.011	0.009	0.011			
Tea, Instant, Iced Tea Mix	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.000	0.001	0.001			
Soft Drinks	0.538	0.506	0.540	0.571	0.551	0.541	0.585	0.511	0.588	0.577	0.616	0.598			
Other Non-Alcoholic Drinks	0.058	0.042	0.040	0.075	0.056	0.064	0.074	0.054	0.074	0.073	0.070	0.086			

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TABLE I.1. PER-CAPITA WEEKLY FOOD PURCHASES BY FAMILY INCOME QUINTILE GROUP, CANADA, 1969 AND 1974 (continued)

Commodity	1969					Family Income Quintile Group					1974					Family Income Quintile Group				
	All	1st	2nd	3rd	4th	5th	All	1st	2nd	3rd	4th	5th	All	1st	2nd	3rd	4th	5th		
kg/week																				
Miscellaneous Groceries																				
Candy, Gum, Chocolate, Marshmallows	0.048	0.046	0.046	0.051	0.045	0.049	0.038	0.036	0.029	0.038	0.043	0.039								
Sugar, All Kinds	0.210	0.193	0.227	0.203	0.230	0.181	0.212	0.287	0.248	0.211	0.212	0.166								
Canned Puddings, Food Powders	0.023	0.023	0.025	0.025	0.023	0.021	0.023	0.020	0.019	0.024	0.026	0.023								
Molasses, Honey, Syrup	0.031	0.046	0.027	0.030	0.033	0.026	0.029	0.034	0.033	0.025	0.024	0.034								
Preserves, Jams, Marmalade	0.030	0.036	0.029	0.032	0.032	0.029	0.026	0.031	0.027	0.025	0.026	0.025								
Salt, Spices, Mustard	0.029	0.034	0.029	0.032	0.031	0.026	0.029	0.039	0.032	0.027	0.027	0.026								
Pickles, Relishes, Olives, Vinegar	0.034	0.037	0.033	0.039	0.032	0.034	0.055	0.051	0.046	0.055	0.062	0.055								
Catsup, Chili Sauce, Gravy Mixes	0.041	0.031	0.047	0.046	0.041	0.037	0.056	0.048	0.057	0.058	0.064	0.054								
Soup, Canned, Ready to Serve	0.130	0.144	0.130	0.137	0.123	0.128	0.118	0.131	0.131	0.110	0.113	0.117								
Soup, Dehydrated	0.005	0.006	0.006	0.006	0.004	0.005	0.006	0.006	0.006	0.006	0.006	0.005								
Baby Food, Canned and Bottled	0.025	0.011	0.042	0.035	0.019	0.020	0.019	0.005	0.030	0.023	0.021	0.017								
Fruit Drink Crystals	0.007	0.005	0.006	0.007	0.007	0.007	0.018	0.018	0.013	0.019	0.020	0.019								
Non-Dairy Substitutes, Sundae Sauce	0.003	0.003	0.003	0.003	0.003	0.004	0.004	0.004	0.003	0.004	0.003	0.004								
Sandwich Spreads	0.004	0.004	0.004	0.005	0.006	0.003	0.007	0.007	0.008	0.008	0.007	0.004								
Canned and Dried Fruits																				
Canned Peaches	0.031	0.039	0.034	0.031	0.034	0.024	0.022	0.030	0.022	0.021	0.019	0.023								
Canned Pears	0.014	0.017	0.017	0.015	0.014	0.011	0.010	0.011	0.014	0.007	0.009	0.011								
Canned Pineapple	0.016	0.016	0.016	0.012	0.015	0.019	0.013	0.011	0.014	0.013	0.010	0.014								
Canned Cherries	0.002	0.001	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.000	0.001	0.001								
Canned Plums	0.001	0.004	0.000	0.000	0.002	0.001	0.001	0.002	0.000	0.000	0.001	0.001								
Canned Fruit Cocktail	0.021	0.020	0.023	0.017	0.025	0.019	0.017	0.015	0.021	0.015	0.016	0.020								
Other Canned Fruits, Pie Fillings	0.033	0.034	0.024	0.032	0.034	0.039	0.023	0.024	0.021	0.019	0.024	0.027								
Unspecified Canned Fruits	0.002	0.000	0.003	0.000	0.000	0.003	0.003	0.004	0.002	0.000	0.004	0.004								
Canned Apple Juice	0.062	0.052	0.046	0.059	0.072	0.078	0.057	0.037	0.046	0.067	0.050	0.068								
Canned Orange Juice	0.057	0.056	0.054	0.061	0.059	0.057	0.053	0.065	0.045	0.048	0.058	0.053								
Other Canned or Bottled Fruit Juice	0.064	0.070	0.055	0.055	0.073	0.071	0.071	0.067	0.069	0.071	0.060	0.084								
Unspecified Canned Fruit Juice	0.007	0.005	0.005	0.009	0.005	0.008	0.012	0.006	0.013	0.018	0.005	0.014								
Raisins	0.008	0.007	0.008	0.008	0.008	0.009	0.006	0.007	0.004	0.007	0.006	0.006								
Other Dried and Preserved Fruits	0.009	0.014	0.009	0.009	0.007	0.008	0.010	0.018	0.009	0.007	0.009	0.010								

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TABLE I.1. PER-CAPITA WEEKLY FOOD PURCHASES BY FAMILY INCOME QUINTILE GROUP, CANADA, 1969 AND 1974 (continued)

Commodity	1969					1974					Family Income Quintile Group				
	Family Income Quintile Group					kg/week	Family Income Quintile Group								
	All	1st	2nd	3rd	4th		5th	All	1st	2nd	3rd	4th	5th		
Canned and Dried Vegetables															
Canned Peas	0.054	0.053	0.055	0.061	0.054	0.047	0.033	0.029	0.042	0.029	0.032	0.032			
Canned Corn, Kernel or Creamed	0.047	0.047	0.052	0.049	0.044	0.046	0.033	0.028	0.038	0.030	0.035	0.031			
Canned Baked Beans	0.039	0.034	0.039	0.043	0.039	0.037	0.025	0.025	0.024	0.023	0.032	0.023			
Other Canned Beans	0.039	0.035	0.034	0.042	0.045	0.040	0.037	0.040	0.030	0.037	0.040	0.039			
Canned Tomatoes	0.046	0.039	0.050	0.054	0.049	0.035	0.037	0.042	0.032	0.035	0.037	0.041			
Other Canned Vegetables	0.044	0.049	0.041	0.041	0.040	0.050	0.039	0.045	0.039	0.034	0.041	0.041			
Unspecified Canned Vegetables	0.001	0.001	0.001	0.001	0.000	0.001	0.001	0.000	0.002	0.000	0.000	0.005			
Canned Tomato Juice	0.068	0.078	0.081	0.063	0.070	0.063	0.054	0.066	0.057	0.048	0.056	0.052			
Other Vegetable Juices	0.010	0.012	0.012	0.009	0.012	0.009	0.014	0.020	0.010	0.011	0.014	0.016			
Dried Vegetables	0.004	0.004	0.002	0.004	0.005	0.003	0.006	0.008	0.006	0.005	0.005	0.007			
Unspecified Beans	0.004	0.004	0.003	0.004	0.004	0.004	0.004	0.003	0.004	0.003	0.006	0.005			
Fresh Fruits															
Oranges	0.283	0.332	0.270	0.265	0.272	0.278	0.222	0.246	0.250	0.216	0.202	0.224			
Bananas	0.170	0.201	0.157	0.174	0.172	0.164	0.165	0.188	0.176	0.158	0.175	0.146			
Apples	0.240	0.263	0.230	0.249	0.228	0.237	0.218	0.230	0.218	0.197	0.216	0.235			
Grapefruit	0.152	0.202	0.113	0.130	0.139	0.178	0.108	0.158	0.115	0.078	0.108	0.105			
Strawberries	0.012	0.009	0.015	0.009	0.009	0.018	0.012	0.013	0.019	0.011	0.009	0.010			
Raspberries	0.001	0.001	0.000	0.001	0.000	0.000	0.001	0.000	0.002	0.000	0.001	0.001			
Grapes	0.072	0.094	0.056	0.031	0.151	0.036	0.043	0.152	0.068	0.034	0.034	0.029			
Peaches	0.020	0.014	0.019	0.020	0.019	0.020	0.018	0.017	0.022	0.014	0.019	0.018			
Melons	0.017	0.021	0.019	0.014	0.014	0.016	0.016	0.016	0.018	0.011	0.015	0.018			
Cherries	0.004	0.006	0.004	0.003	0.004	0.004	0.006	0.004	0.007	0.007	0.007	0.004			
Plums	0.009	0.008	0.005	0.014	0.005	0.006	0.014	0.021	0.014	0.011	0.011	0.017			
Pears	0.024	0.020	0.020	0.030	0.024	0.025	0.028	0.029	0.039	0.026	0.022	0.025			
Other Fresh Fruit	0.061	0.049	0.077	0.051	0.057	0.063	0.077	0.059	0.083	0.072	0.074	0.089			

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TABLE I.1. PER-CAPITA WEEKLY FOOD PURCHASES BY FAMILY INCOME QUINTILE GROUP, CANADA, 1969 AND 1974 (concluded)

Commodity	1969					1974					Family Income Quintile Group				
	All	1st	2nd	3rd	4th	5th	All	1st	2nd	3rd	4th	5th	Family Income Quintile Group		
						kg/week									
<i>Fresh Vegetables</i>															
Potatoes	0.768	0.710	0.839	0.756	0.780	0.780	0.616	0.717	0.713	0.587	0.616	0.537			
Tomatoes	0.094	0.108	0.089	0.086	0.096	0.098	0.095	0.114	0.113	0.075	0.094	0.094			
Lettuce	0.072	0.070	0.064	0.064	0.073	0.083	0.082	0.096	0.077	0.071	0.083	0.086			
Carrots	0.103	0.118	0.102	0.091	0.098	0.097	0.093	0.126	0.094	0.075	0.083	0.086			
Celery	0.045	0.053	0.039	0.042	0.044	0.049	0.039	0.049	0.042	0.031	0.038	0.038			
Onions, Regular and Spanish	0.074	0.088	0.084	0.073	0.067	0.064	0.077	0.097	0.075	0.067	0.068	0.084			
Cabbage	0.055	0.058	0.059	0.051	0.054	0.057	0.044	0.054	0.047	0.036	0.046	0.043			
Cauliflower	0.010	0.016	0.007	0.008	0.009	0.013	0.010	0.010	0.007	0.009	0.010	0.012			
Turnips	0.034	0.044	0.036	0.037	0.033	0.029	0.025	0.031	0.030	0.021	0.021	0.026			
Beans, Green and Yellow	0.010	0.011	0.013	0.010	0.009	0.011	0.012	0.012	0.010	0.009	0.011	0.017			
Corn	0.023	0.021	0.016	0.016	0.021	0.030	0.018	0.013	0.018	0.014	0.021	0.021			
Cucumbers	0.023	0.022	0.022	0.021	0.022	0.028	0.024	0.023	0.027	0.018	0.025	0.029			
Mushrooms	0.004	0.007	0.002	0.003	0.003	0.004	0.008	0.005	0.006	0.006	0.009	0.010			
Other Root and Gourd Vegetables	0.040	0.034	0.038	0.031	0.036	0.052	0.056	0.052	0.065	0.046	0.054	0.061			
Other Leaf and Stalk Vegetables	0.025	0.024	0.021	0.019	0.027	0.031	0.034	0.033	0.030	0.027	0.038	0.041			
<i>Frozen Foods</i>															
Frozen Strawberries	0.004	0.003	0.002	0.004	0.003	0.004	0.003	0.002	0.003	0.003	0.003	0.003			
Frozen Raspberries	0.000	0.001	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.001			
Other Frozen Fruits	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.001			
Frozen Orange Juice	0.017	0.014	0.010	0.011	0.018	0.029	0.029	0.018	0.018	0.023	0.028	0.046			
Frozen Juices	0.006	0.003	0.004	0.004	0.007	0.011	0.007	0.004	0.004	0.005	0.009	0.011			
Frozen Peas	0.015	0.008	0.010	0.013	0.016	0.020	0.011	0.010	0.008	0.007	0.015	0.013			
Frozen Green Beans	0.004	0.003	0.002	0.002	0.004	0.007	0.004	0.002	0.005	0.003	0.005	0.006			
Frozen Potatoes	0.015	0.011	0.014	0.015	0.015	0.020	0.024	0.012	0.029	0.032	0.026	0.021			
Frozen Corn	0.004	0.001	0.002	0.003	0.006	0.006	0.004	0.002	0.002	0.004	0.007	0.006			
Other Frozen Vegetables	0.014	0.010	0.012	0.011	0.012	0.019	0.014	0.010	0.014	0.011	0.016	0.018			
Frozen Fruit Pies	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.001	0.001	0.000			
Frozen Cakes	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.001	0.002	0.002	0.003	0.005			
Frozen Meat and Poultry Dinners	0.009	0.009	0.007	0.008	0.011	0.010	0.015	0.013	0.016	0.014	0.016	0.016			
<i>Prepared and Partially Prepared Dishes</i>															
Macaroni and Other Dinners	0.042	0.038	0.044	0.047	0.044	0.037	0.040	0.043	0.037	0.038	0.047	0.039			
Instant Mashed Potatoes	0.001	0.001	0.001	0.001	0.000	0.000	0.002	0.004	0.002	0.002	0.001	0.002			
Salads, Coleslaw	0.003	0.004	0.004	0.002	0.002	0.003	0.004	0.005	0.004	0.003	0.003	0.004			
Snack Foods	0.029	0.023	0.026	0.027	0.032	0.031	0.033	0.020	0.026	0.034	0.038	0.040			

Sources: Statistics Canada, 1969 Family Food Expenditure Survey and Statistics Canada, 1974 Urban Family Food Expenditure Survey.

APPENDIX J

NUTRITIVE VALUE OF THE EDIBLE PORTION OF 100 g OF
FOOD AS PURCHASED: FOOD DISAPPEARANCE DATA

Table J.1

TABLE J.1. NUTRITIVE VALUE OF THE EDIBLE PORTION OF 100 g OF FOOD AS PURCHASED: FOOD DISAPPEARANCE DATA

Commodity	Source	Specification	Food Energy	Protein	Fat	Carbohydrate	Calcium	Phosphorus	Iron	Vitamin A	Thiamine	Riboflavin	Niacin	Ascorbic Acid	Total Folate
			cal	g	g	g	mg	mg	mg	RE	mg	mg	NE	mg	μ
<i>Cereals</i>															
Wheat Flour	2439	All purpose; enriched	366.8	1516.6	10.5	1.0	76.7	16.1	87.6	2.9 ^a	0.0	0.44	0.26 ^a	0.0	21.4
	2440	Unenriched	366.8	1516.6	10.5	1.0	76.7	16.1	87.6	0.8	0.0	0.05	0.05	0.0	21.4
Rye Flour	1923	Medium	352.8	1458.4	11.4	1.7	75.4	27.2	264.0	2.6	0.0	0.29	0.11	4.6	78.2
Oatmeal and Rolled Oats	1390	Dry form	393.1	1625.1	14.3	7.4	68.7	53.4	408.2	4.5	0.0	0.59	0.14	4.0	56.5
Pot and Pearl Barley	146	Pearled pot or Scotch	350.7	1450.2	9.6	1.1	77.8	34.2	292.3	2.7	0.0	0.20	0.07	5.7	19.6
Corn Flour and Meal	887	De-germed, unenriched	366.9	1516.8	7.9	1.2	7.9	6.0	99.8	1.1	133.0	0.14	0.05	1.0	22.0
Buckwheat Flour	495	Light	349.7	1446.0	6.4	1.2	80.1	11.1	88.7	1.0	0.0	0.07	0.03	1.9	42.9
Rice	1877	White, raw, unenriched	365.9	1512.6	6.7	0.4	81.0	24.1	94.7	0.8	0.0	0.07	0.03	1.6	29.0
Breakfast Food		Weighted average, wheat, corn, rice, and oat types	359.8	1487.5	6.8	1.3	80.1	30.8	159.5	9.6 ^a	0.0	1.31 ^a	2.44 ^a	14.7 ^a	29.1
<i>Sugar and Syrup</i>															
Sugar	2230	Beet, granulated, refined	388.0	1604.4	0.0	0.0	100.2	0.0	0.0	0.1	0.0	0.00	0.00	0.0	0.0
Maple Sugar	2234		350.7	1450.2	—	—	90.7	144.2	11.1	1.4	—	—	—	0.0	0.0
Honey	1134	Strained or extracted	306.4	1266.8	0.3	0.0	82.9	5.0	6.0	0.5	0.0	0.00	0.03	0.3	1.5
Other	2051	Corn syrup (glucose)	292.3	1208.4	0.0	0.0	75.6	46.3	16.1	4.1	0.0	0.00	0.00	0.0	0.0
	1342	Barbados molasses	273.1	1129.3	0.0	0.0	70.5	246.9	50.4	0.0	0.0	0.05	0.20	0.0	0.0
<i>Pulses and Nuts</i>															
Dry Beans	154	Mature seeds, white, raw	342.7	1416.6	22.4	1.6	61.8	145.1	428.4	7.8	0.0	0.64	0.22	5.7	131.0
Baked Canned Beans	156	Pork and tomato sauce	122.9	508.4	6.1	2.6	19.1	54.4	92.7	1.8	13.1	0.07	0.03	1.6	24.0
Dry Peas	1531	Whole, raw	342.7	1416.6	24.2	1.3	60.7	64.5	342.7	5.1	12.0	0.74	0.29	7.3	33.6
Peanuts	1492B	Raw, shelled	568.5	2350.2	26.2	47.8	18.7	69.5	404.2	2.1	—	1.13	0.12	23.0	106.8
Tree Nuts		Weighted average, shelled and not shelled	516.1	2133.7	12.7	48.5	16.2	100.3	345.8	3.0	3.6	0.36	0.22	4.8	50.8
<i>Fats and Oils</i>															
Margarine	1317	Vitamin A added	725.7	3000.4	0.6	81.6	0.4	20.1	16.1	0.0	1076.5 ^a	—	—	0.0	0.0
Lard	1241		909.2	3758.6	0.0	100.8	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.0
Shortening and Shortening Oils	999	Fats (cooking), vegetable fats	891.1	3683.7	0.0	100.8	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.0
Salad Oils	1401	Salad or cooking	891.1	3683.7	0.0	100.8	0.0	0.0	0.0	0.0	—	0.00	0.00	0.0	0.0
Butter ^b	01-001		722.4	2986.6	0.8	81.7	0.0	23.7	22.8	0.1	760.0	0.00	0.03	—	2.8

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TABLE J.1. NUTRITIVE VALUE OF THE EDIBLE PORTION OF 100 g OF FOOD AS PURCHASED: FOOD DISAPPEARANCE DATA (continued)

Commodity	Source	Specification	Food Energy	Protein	Fat	Carbohydrate	Calcium	Phosphorus	Iron	Vitamin A	Thiamine	Riboflavin	Niacin	Ascorbic Acid	Total Folate
			cal	g	g	g	mg	mg	mg	RE	mg	mg	NE	mg	µ
Grapefruit, Fresh	1053	Raw, all varieties	20.6	0.2	0.0	5.3	8.0	8.0	0.2	4.0	0.01	0.01	0.1	19.1	5.0
Lemons, Fresh	1243	Raw	18.2	0.7	0.2	5.5	79.0	10.8	1.8	1.3	0.02	0.01	0.0	0.0	4.7
Oranges, Fresh	1420	Raw, all varieties	36.0	149.1	0.7	8.9	30.1	14.7	0.2	14.7	0.07	0.03	0.2	36.8	17.6
Grapefruit Juice	1071	Canned, unsweetened	41.3	0.5	0.1	9.8	8.0	14.1	0.4	1.0	0.03	0.01	0.2	34.2	4.3
Lemon Juice	1246	Canned, unsweetened	23.1	0.4	0.1	7.6	7.0	10.0	0.2	2.0	0.03	0.01	0.1	42.3	3.5
Orange Juice	1432	Weighted Average of canned	49.0	0.8	0.2	11.4	10.0	18.1	0.4	20.1	0.07	0.01	0.3	40.3	13.0
Orange and Grapefruit Juice	1433	sweetened and unsweetened	43.3	0.6	0.2	10.1	10.0	15.1	0.3	10.0	0.05	0.01	0.2	34.2	8.7
<i>Other Fruit</i>															
Apples, Fresh	13A	Freshly harvested and stored, not pared	46.7	0.1	0.4	11.6	5.6	8.0	0.2	7.2	0.02	0.01	0.0	3.2	4.6
Apples, Canned	29	Sweetened	91.7	0.2	0.1	24.0	4.0	5.0	0.5	4.0	0.01	0.01	0.0	1.0	3.5
Apple Juice	27	Canned or bottled, fortified	47.3	0.1	0.0	12.0	6.0	9.0	0.6	9.0 ^c	0.01	0.01	0.1	35.2 ^a	0.5
Apples, Frozen	24	Sliced, sweetened	93.7	0.2	0.1	24.4	5.0	6.0	0.5	2.0	0.01	0.03	0.2	7.0	0.0
Apples, Dried	19	Weighted average of dried and dehydrated	301.3	1.1	1.7	77.4	33.5	55.9	1.7	38.0	0.04	0.10	0.5	10.1	0.0
Applesauce	21	Canned, sweetened	91.7	0.2	0.1	24.0	4.0	5.0	0.5	4.0	0.01	0.01	0.0	1.0	3.5
Apple Pie Filling	29	Applesauce, sweetened	91.7	0.2	0.1	24.0	4.0	5.0	0.5	4.0	0.01	0.01	0.0	1.0	3.5
Apples, Otherwise Used	13A	Freshly harvested and stored, not pared	46.7	0.1	0.4	11.6	5.6	8.0	0.2	7.2	0.02	0.01	0.0	3.2	4.6
Apricots, Fresh	30	raw	48.3	0.9	0.1	12.1	16.1	21.7	0.4	255.8	0.02	0.03	0.6	9.4	3.4
Apricots, Canned	35	solids and liquids, heavy syrup pack	86.6	0.6	0.1	22.1	11.1	15.1	0.3	175.4	0.01	0.01	0.4	4.0	3.6
Apricots, Frozen	42	Sweetened	98.7	0.7	0.1	25.3	10.0	19.1	0.9	169.3	0.01	0.03	0.8	28.2	3.6
Bananas, Fresh	141A	Raw, common, good quality	57.4	3.3	0.1	15.0	5.4	17.5	0.4	12.8	0.03	0.03	1.0	6.7	13.8
Blueberries, Fresh	424	Raw	57.4	0.6	0.4	14.1	13.9	12.0	0.9	9.2	0.02	0.05	0.4	12.9	5.9
Blueberries, Canned	426	Extra heavy syrup pack	101.8	0.4	0.2	26.2	9.0	8.0	0.6	4.0	0.01	0.01	0.2	6.0	6.4
Blueberries, Frozen	427	Unsweetened	55.4	0.7	0.5	13.7	10.0	13.1	0.8	7.0	0.03	0.05	0.5	7.0	6.4
Cherries, Fresh	662/663	Weighted average of sweet and sour	59.3	1.1	0.2	14.7	20.1	17.4	0.3	45.5	0.04	0.07	0.3	9.1	6.8
Cherries, Canned	671B	Sweet, heavy syrup pack, no pits	81.6	0.9	0.2	20.6	15.1	13.1	0.3	6.0	0.01	0.01	0.2	3.0	7.5
Cherries, Frozen	674	Sour, red, sweetened	112.8	1.0	0.4	28.0	12.0	15.1	0.5	48.3	0.03	0.05	0.3	6.0	7.5
Cranberries, Fresh	920	Raw	44.5	0.3	0.6	10.4	13.5	9.6	0.4	3.8	0.02	0.01	0.1	10.6	1.6
Grapes, Fresh	1084A	Raw, American type (slip-skin)	43.8	0.8	0.6	9.9	10.1	7.6	0.2	6.3	0.03	0.01	0.2	2.5	3.1
Grape Juice	1088	Concord, Niagara, good quality	66.5	0.2	0.0	16.7	11.1	12.0	0.3	8.0	0.03	0.01	0.2	15.9 ^a	1.4
Melons, Fresh	2424	Bottled or canned, fortified	13.1	54.2	0.2	3.2	3.5	5.0	0.2	29.7	0.01	0.01	0.1	3.5	0.0
Peaches, Fresh	1479A	Watermelon, raw	33.3	0.5	0.0	8.5	7.8	16.6	0.4	116.6	0.01	0.04	0.8	6.1	2.9
Peaches, Canned	1483	Raw, peeled fruit	78.6	0.4	0.1	20.2	4.0	12.0	0.3	43.3	0.01	0.01	0.6	3.0	3.3
Peaches, Frozen	1490	Heavy syrup pack	88.7	0.4	0.1	22.7	4.0	13.1	0.5	65.5	0.01	0.03	0.7	40.3	3.3
Pears, Fresh	1502A	Sliced, sweetened	55.9	0.6	0.3	14.0	7.3	10.1	0.2	1.8	0.01	0.03	0.1	3.6	10.3
		Raw, including skin, good quality													

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TABLE J.1. NUTRITIVE VALUE OF THE EDIBLE PORTION OF 100 g OF FOOD AS PURCHASED: FOOD DISAPPEARANCE DATA (continued)

Commodity	Source	Specification	Food Energy	Protein	Fat	Carbohydrate	Calcium	Phosphorus	Iron	Vitamin A	Thiamine	Riboflavin	Niacin	Ascorbic Acid	Total Folate
			cal	g	g	g	mg	mg	mg	RE	mg	mg	mg	mg	μ
Pears, Canned	1507	Heavy syrup pack	76.6	316.6	0.2	0.2	19.7	5.0	7.0	0.0	0.01	0.01	0.1	1.0	11.4
Pineapples, Fresh	1611	Raw	27.2	112.6	0.2	0.1	7.1	8.9	4.2	3.6	0.04	0.01	0.1	8.9	5.5
Pineapples, Canned	1616	Heavy syrup pack	74.6	308.4	0.3	0.1	19.5	11.1	5.0	5.0	0.07	0.01	0.2	7.0	10.6
Pineapple Juice	1619	Canned, unsweetened	55.4	229.1	0.4	0.1	13.6	15.1	9.0	3.0	0.05	0.01	0.2	9.0	8.7
Plums, Fresh	1639	Raw, Damson	60.5	250.2	0.4	0.0	16.3	16.5	15.6	0.4	27.5	0.07	0.02	0.4	3.2
Plums, Canned	1645	Heavy syrup pack	83.6	345.7	0.4	0.1	21.7	9.0	10.0	0.9	121.9	0.01	0.01	0.4	2.0
Plums, Frozen	1639	Figures for fresh plums used	60.5	250.2	0.4	0.0	16.3	16.5	15.6	0.4	27.5	0.07	0.02	0.4	3.2
Raspberries, Fresh	1849	Raw, red	55.7	230.4	1.1	0.4	13.2	21.5	8.8	12.7	0.02	0.08	0.8	24.4	4.9
Raspberries, Canned	1851	Red, water pack, unsweetened	35.2	145.7	0.7	0.1	8.8	15.1	15.1	0.6	9.0	0.01	0.03	0.5	4.9
Raspberries, Frozen	1852	Red, sweetened	98.7	408.4	0.7	0.2	24.8	13.1	17.1	7.0	0.01	0.05	0.6	21.1	4.9
Strawberries, Fresh	2217A	Raw, good quality	35.8	148.0	0.6	0.4	8.1	20.3	20.3	0.9	5.8	0.02	0.06	0.5	15.4
Strawberries, Canned	2220	In syrup	92.7	383.3	0.4	0.2	23.6	13.1	16.1	3.0	0.01	0.05	0.5	55.4	16.1
Strawberries, Frozen	2220	Whole, sweetened	92.7	383.3	0.4	0.2	23.6	13.1	16.1	3.0	0.01	0.05	0.5	55.4	16.1
Unspecified Canned Fruit	1023	Fruit cocktail, solids and liquid, heavy syrup pack	76.6	316.6	0.4	0.1	19.8	9.0	12.0	0.4	14.1	0.01	0.01	0.4	0.9
Jams, Jellies, Marmalade	1148 1318	Average of marmalade, jams and preserves	266.6	1102.2	0.5	0.1	70.6	27.7	8.9	4.6	0.01	0.02	0.1	4.0	8.0
<i>Vegetables</i>															
Cabbage, Fresh	512A	Raw, trimmed, common	21.7	90.0	1.1	0.1	4.8	44.4	26.3	0.3	11.8	0.04	0.04	0.3	42.6
Lettuce	1258A	Raw, iceberg, good quality	12.4	51.5	0.8	0.0	2.7	19.1	21.0	0.4	31.6	0.05	0.05	0.2	5.7
Spinach, Fresh	2169A	Raw, trimmed, good quality	26.2	108.2	3.2	0.3	4.3	93.7	51.4	3.1	816.4	0.09	0.20	0.6	51.4
Spinach, Canned	2171	Solids and liquid	19.1	79.1	2.0	0.4	3.0	85.6	26.2	2.1	554.4	0.01	0.09	0.9	14.1
Spinach, Frozen	2179	Leaf	25.2	104.2	3.0	0.3	4.2	105.8	45.3	2.5	816.4	0.09	0.16	0.5	35.2
Asparagus, Fresh	46	Raw, spears	14.6	60.6	1.4	0.1	2.8	12.4	35.0	0.5	50.8	0.10	0.11	1.0	18.6
Asparagus, Canned	48	Green, regular pack	18.1	74.8	1.9	0.3	2.9	18.1	43.3	1.7	51.4	0.05	0.09	0.8	15.1
Asparagus, Frozen	62	Spears	24.2	100.0	3.3	0.2	3.9	23.1	69.5	1.2	78.6	0.18	0.14	1.3	29.2
Beans, Fresh	182	Average, green and yellow, raw	26.1	108.2	1.6	0.1	5.8	49.6	38.5	0.7	37.7	0.07	0.09	0.6	17.2
Beans, Canned	195	Average, green and yellow, regular pack	18.6	77.1	1.0	0.1	3.9	32.1	19.8	1.2	17.6	0.03	0.03	0.4	4.5
Beans, Frozen	191	Average, green and yellow or wax, cut	27.2	112.4	1.7	0.0	5.8	36.8	30.7	0.8	34.2	0.07	0.09	0.4	10.5
Lima Beans, Frozen	174	Baby	122.9	508.4	7.6	0.1	21.7	35.9	123.7	2.8	22.1	0.09	0.05	1.2	19.1
Beets, Fresh	384C	Raw, without tops	30.3	125.3	1.1	0.0	6.5	10.5	21.8	0.4	1.4	0.02	0.03	0.4	7.0
Beets, Canned	386	Solids and liquids	34.2	141.5	0.9	0.1	7.4	13.2	16.0	0.6	1.0	0.01	0.01	0.2	3.0
Broccoli, Fresh	483A	Raw spears, partially trimmed	25.1	104.0	2.8	0.2	4.3	75.9	57.5	0.8	196.5	0.07	0.17	1.1	88.8
Broccoli, Frozen	487	Spears	28.2	116.6	3.3	0.1	4.8	40.6	56.7	0.7	191.5	0.07	0.12	0.6	78.6
Brussels Sprouts, Fresh	489A	Raw, good quality	41.7	172.4	4.5	0.3	7.2	31.2	69.5	1.4	51.0	0.09	0.14	0.8	94.6
Brussels Sprouts, Frozen	491	Raw, without tops	36.2	150.0	3.3	0.1	6.8	20.7	58.5	0.9	55.2	0.10	0.11	0.6	87.6
Carrots, Fresh	619C	Solids and liquids	34.7	143.5	0.9	0.1	7.5	28.6	27.8	0.5	909.2	0.04	0.04	0.5	6.6
Carrots, Canned	621	Solids and liquids	28.2	116.6	0.6	0.1	6.1	23.6	18.8	0.7	1008.0	0.01	0.01	0.4	2.0
Carrots, Frozen	620	Cooked, boiled, drained	31.2	129.1	0.9	0.1	6.7	31.1	29.2	0.6	1058.4	0.05	0.05	0.5	6.0
Cauliflower, Fresh	630B	Raw, untrimmed	10.6	44.0	1.0	0.0	1.9	9.2	20.6	0.4	2.3	0.04	0.03	0.4	30.6
Cauliflower, Frozen	632		22.1	91.7	1.8	0.1	4.0	17.9	39.6	0.6	3.0	0.05	0.05	0.5	56.4

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TABLE J.1. NUTRITIVE VALUE OF THE EDIBLE PORTION OF 100 g OF FOOD AS PURCHASED: FOOD DISAPPEARANCE DATA (continued)

TABLE J.1. NUTRITIVE VALUE OF THE EDIBLE PORTION OF 100 g OF FOOD AS PURCHASED: FOOD DISAPPEARANCE DATA (continued)																	
Commodity	Source	Specification	Food Energy cal	Protein g	Fat g	Carbo- hydrate g	Cal- cium mg	Phos- phorus mg	Iron mg	Vita- min			Thia- mine mg	Ribo- flavin mg	Niacin mg	Ascor- bic Acid mg	Total Folate µ
										RE	A	mg					
Canned meat	1783 2006 2008	Average	246.9	1020.8	17.0	18.9	0.7	6.7	88.7	1.6	0.0	0.29	0.20	5.0	0.0	4.3	
Eggs ^b Eggs	01-123	Chicken, raw, average whole fresh and frozen	140.0	578.6	10.7	9.8	1.0	49.7	159.7	1.8	138.4	0.07	0.26	5.5	0.0	57.5	
Poultry Chicken	686B 718C 731C	Average, total edible raw Hens and cocks, total edible, raw	130.4	539.1	13.0	8.2	0.0	7.8	133.6	1.2	176.6	0.05	0.19	7.0	—	5.4	
Fowl			219.2	906.4	12.8	18.2	0.0	7.8	122.8	1.0	238.4	0.04	0.13	8.6	—	5.6	
Turkey	FAO 206 2327C 961C	All classes, total edible, raw Domesticated, total edible, raw	160.4	663.3	14.8	10.8	0.0	24.2	129.5 ^e	3.2	181.4	0.05	0.07	3.0	—	7.4	
Duck		Domesticated, total edible, raw	269.4	1114.0	13.2	23.6	0.0	8.2	145.4	1.3	272.1 ^d	0.06	0.15	5.9	—	9.4	
Goose	1041C	Domesticated, total edible, raw	260.4	1076.8	12.0	23.1	0.0	7.3	129.5	1.1	272.1 ^d	0.05	0.13	7.3	—	8.4	
Fish																	
Fish, Shellfish Fresh and Frozen	797	Weighted average Cod, dehydrated, lightly salted Weighted average	111.6	461.5	17.5	4.0	0.1	11.6	212.5	0.4	22.3	0.06	0.10	5.2	1.6	20.6	
Fish, Cured (Smoked, Salted, Pickled)			378.0	1562.6	82.4	2.8	0.0	14.2 ^f	898.1	3.6	0.0	0.07	0.44	24.6	0.0	18.6	
Fish and Shellfish, Canned			175.8	727.1	25.9	7.1	0.2	96.6	270.1	2.0	21.5	0.03	0.13	13.4	0.0	18.0	
Dairy Products ^b																	
Cheddar Cheese	01-009	Domestic, American type American, pasteurized	405.7	1677.5	25.1	33.4	1.2	727.1	516.2	0.6	305.3	0.02	0.37	5.8	0.0	18.4	
Process Cheese	01-042		378.4	1564.4	22.3	31.5	1.6	620.4	750.8	0.4	292.2	0.02	0.35	5.3	0.0	7.7	
Other Cheese	01-007	Camembert, domestic	302.0	1248.4	19.9	24.4	0.4	390.6	349.3	0.3	254.0	0.02	0.48	4.8	0.0	6.2	
Cottage Cheese	01-012	Creamed	104.2	430.8	12.6	4.5	2.7	60.4	132.8	0.1	48.4	0.02	0.16	2.5	—	12.2	
Evaporated Whole Milk	01-096	Unsweetened, ascorbic acid added Canned, sweetened	135.5	560.4	6.8	8.7	10.1	262.8	204.2	0.2	54.4	0.04	0.31	1.9	14.1 ^a	8.0	
Condensed Whole Milk	01-095		323.3	1336.6	7.9	7.6	54.8	285.7	255.3	0.2	81.5	0.09	0.41	2.1	2.6	11.3	
Evaporated Partly Skimmed Milk	5001		110.8	458.4	6.7	4.0	9.8	288.2	225.8	0.2	48.3	0.07	0.42	1.9	1.1	6.5	
Powdered Whole Milk	01-090		499.7	2066.0	26.5	26.9	38.7	919.7	781.7	0.4	282.2	0.28	1.20	6.8	8.7	4.0	
Powdered Skim Milk	01-092	Non-fat solids, instant, fortified	361.1	1492.8	35.3	0.7	52.6	1240.6	992.6	0.3	8.8	0.41	1.74	9.3	5.6	5.0	
Powdered Butter Milk	01-094		390.0	1612.2	34.5	5.8	49.4	1193.7	940.0	0.3	54.4	0.39	1.57	7.9	5.7	4.7	
Powdered Whey	01-115	Sweet	355.5	1469.7	13.0	1.0	75.0	802.4	939.1	0.8	10.0	0.51	2.20	3.3	1.5	11.7	
Fluid Whole Milk	01-077	3.3% fat	62.0	256.2	3.3	3.3	4.6	120.4	94.2	0.0	31.3	0.03	0.16	0.9	0.9	5.1	
Fluid Buttermilk	01-088		40.6	168.2	3.3	0.8	4.8	117.3	90.0	0.0	1.2	0.03	0.15	0.7	0.9	8.5	

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TABLE J.1. NUTRITIVE VALUE OF THE EDIBLE PORTION OF 100 g OF FOOD AS PURCHASED: FOOD DISAPPEARANCE DATA (concluded)

Commodity	Source	Specification	Food Energy	Protein	Fat	Carbohydrate	Calcium	Phosphorus	Iron	Vitamin A	Thiamine	Riboflavin	Niacin	Ascorbic Acid	Total Folate
			cal	g	g	g	mg	mg	mg	RE	mg	mg	NE	mg	μ
Fluid Partly Skimmed Milk	01-079	2.0% fat	50.0	3.3	1.9	4.8	122.6	95.7	0.0	21.2	0.03	0.16	0.9	0.9	5.1
Fluid Skim Milk	01-085		35.1	3.4	0.1	4.8	124.4	101.7	0.0	1.2	0.03	0.14	0.9	0.9	5.3
Chocolate Drink	01-103	Made with 2.0% milk	72.0	3.2	2.0	10.4	114.4	102.4	0.2	25.4	0.03	0.16	0.8	0.9	4.8
Yoghurt	01-116	Made with whole milk	62.0	3.4	3.2	4.6	121.5	95.5	0.0	30.2	0.02	0.14	0.9	0.5	7.5
Milkshake Mix	01-111	Vanilla shake, thick	112.6	3.8	3.0	17.8	147.3	116.2	0.1	28.2	0.03	0.19	—	0.0	6.6
Milk In Ice Cream ^g	01-077	Fluid whole	124.9	10.2	9.0	14.4	372.1	291.1	0.1	96.8	0.11	0.50	2.8	2.9	15.8
Sherbet	01-066	Orange	141.1	1.1	2.0	30.6	54.0	38.8	0.1	20.2	0.01	0.04	0.0	2.0	7.3
Ice Milk	1143		153.2	4.8	5.1	22.5	157.2	125.0	0.1	63.5	0.05	0.22	0.1	2.0	2.1
Other Milk Products ^h	01-096	Evaporated whole milk	135.5	6.8	7.6	10.1	262.8	204.2	0.2	54.4	0.04	0.31	1.9	14.1 ^a	8.0
Other Milk By-Products	01-091	Dry, skim, regular	365.3	36.4	0.7	52.4	1266.8	976.0	0.3	8.0	0.41	1.54	9.3	6.8	5.0
<i>Beverages</i>															
Coffee	799	Dry powder	130.0	0.0	0.0	35.2	180.4	386.0	5.6	0.0	0.00	0.20	30.8	0.0	0.0
Cocoa	783	High to medium fat powder, plain	267.1	17.4	19.1	51.9	123.9	654.2	10.7	6.0	0.11	0.46	2.4	0.0	0.0
Soft Drinks	404	Cola type	39.3	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.0	0.0
<i>Miscellaneous</i>															
Potatoes, Processed	1789	Average French fries and potato chips	424.3	4.8	26.7	43.3	26.8	134.0	1.5	0.0	0.16	0.07	3.9	18.6	32.3
Sauces, Dressing, Spreads	1809 1932 1938 1942 1498	Average fresh, mayonnaise and Thousand Island	547.7	0.8	56.7	11.8	13.4	19.8	0.5	90.7	0.01	0.03	0.0	2.8	0.3
Peanut Butter		Small amounts of fats, sweetener and salt added	586.6	25.7	49.8	19.6	61.4	398.1	2.0	0.0	0.11	0.11	20.9	0.0	79.6
Vinegar	2407	Distilled	12.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.0	0.0
Soups	2078	Chicken noodle	53.4	2.8	1.6	6.6	7.0	30.2	0.4	3.0	0.01	0.01	0.7	0.0	2.0
Pickles and Relishes	1558	Average of pickles, relishes and olives	68.2	0.8	0.6	15.9	24.0	23.6	1.6	10.8	0.00	0.02	0.0	6.9	0.0
Pasta	1565 1301	Macaroni, unenriched	371.9	12.6	1.2	75.8	27.2	163.2	1.3	0.0	0.09	0.05	1.7	0.0	10.7

^a Added by manufacturer in accordance with Food and Drug Regulations. No suitable value found but measurable amount may be present.

^b Figures used are from USDA, *Handbook No. 8-1*.

^c Vitamin A value for fresh apples $\times 4.5$.

^d FAO Nutritional Studies, No. 11-1954.

^e The figure used is that for roaster chicken.

^f The figure used is that for smoked salmon (1960).

^g Milk equivalent — adjusted for higher butterfat content.

^h Figures used are for evaporated whole milk as consumption was 9 \times that of condensed whole milk and 142 \times that of malted milk.

Source: Health and Welfare Canada, *Nutrition Canada Survey Food-Nutrient Conversion File* (based on Handbook #8, with additional Canadian foods), unless otherwise stated.

APPENDIX K

NUTRITIVE VALUE OF THE EDIBLE PORTION
OF 100 g OF FOOD AS PURCHASED: FOOD SURVEY DATA

Table K.1

TABLE K.1. NUTRITIVE VALUE OF THE EDIBLE PORTION OF 100 g OF FOOD AS PURCHASED: FOOD SURVEY DATA

Commodity	Source	Specification	Food Energy		Protein	Fat	Carbohydrate	Calcium	Phosphorus	Iron	Vitamin A	Thiamine	Riboflavin	Niacin	Ascorbic Acid	Total Folate
			cal	kJ	g	g	g	mg	mg	mg	RE	mg	mg	NE	mg	μ
Dairy Products ^a																
Milk																
Homogenized Milk	01-077	Fluid, 3.3% fat	62.0	256.2	3.3	3.3	4.6	120.4	94.2	0.0	31.3	0.03	0.16	0.9	0.9	5.1
Low-Fat Milk	01-079	Fluid, 2.0% fat	50.0	206.6	3.3	1.9	4.8	122.6	95.7	0.0	21.2	0.03	0.16	0.9	0.9	5.1
Skim Milk	01-085	Made with 2% milk	35.1	145.1	3.4	0.1	4.8	124.4	35.1	0.0	1.2	0.03	0.14	0.9	0.9	5.3
Chocolate Milk	01-103	Average, homogenized and low fat milk	72.0	297.5	3.2	2.0	10.4	114.4	102.4	0.2	25.4	0.03	0.16	0.8	0.9	4.8
Unspecified Milk	01-077		56.0	231.5	3.3	2.6	4.7	121.5	95.1	0.0	26.2	0.03	0.16	0.9	0.9	5.1
	01-079															
Other Dairy Products																
Buttermilk	01-088	Evaporated whole milk	40.6	168.2	3.3	0.8	4.8	117.3	90.0	0.0	1.2	0.03	0.15	0.7	0.9	8.5
Condensed and Evaporated Milk ^b	01-096															
Powdered Milk	01-092	Non-fat solids, instant	135.5	560.4	6.8	7.6	10.1	262.8	204.2	0.2	54.4	0.04	0.31	1.9	14.1 ^c	8.0
Half and Half Cereal Cream	01-049	Half-and-half (cream and milk), fluid	361.1	1492.8	35.3	0.7	52.6	1240.6	992.6	0.3	8.8	0.41	1.74	9.3	5.6	5.0
Fresh, Whipping, Table Cream	01-050	Light, coffee or table	131.3	542.8	2.9	11.6	4.3	105.7	96.0	0.0	107.7	0.03	0.14	0.1	0.8	2.4
Ice Cream, Sherbet	01-061	Ice cream, approximately 10% fat	196.8	814.0	2.7	19.4	3.6	96.8	80.4	0.0	183.5	0.03	0.14	0.1	0.7	2.2
Ice Milk	01-056	Sour cream, cultured	204.0	843.3	3.6	10.8	24.0	133.1	101.7	0.0	100.8	0.03	0.24	0.1	0.5	2.2
Sour Cream, Chip Dips	01-050	Light coffee or table	216.0	892.8	3.1	21.1	4.3	117.3	85.5	0.0	196.6	0.03	0.14	0.1 ^d	0.8	10.8
All Other Cream	01-116	Made from whole milk	196.8	814.0	2.7	19.4	3.6	96.8	80.4	0.0	183.5	0.03	0.14	0.1	0.7	2.2
Yoghurt	01-001	Domestic, American type	62.0	256.2	3.4	3.2	4.6	121.5	95.5	0.0	30.2	0.02	0.14	0.9	0.5	7.5
Butter	01-009	Pasteurized, American	722.4	2986.6	0.8	81.7	0.0	23.7	22.8	0.1	93.3	0.00	0.03	—	0.0	2.8
Cheddar Cheese	01-042	Creamed	405.7	1677.5	25.1	33.4	1.2	727.1	516.2	0.6	305.3	0.02	0.37	5.8	0.0	18.4
Packaged Process Cheese, Spreads	01-012	Camembert, domestic	378.4	1564.4	22.3	31.5	1.6	620.4	750.8	0.4	292.2	0.02	0.35	5.3	0.0	7.7
Cottage Cheese	01-007	Pasteurized process cheese food, American	104.2	430.8	12.6	4.5	2.7	60.4	132.8	0.1	48.4	0.02	0.16	2.5	0.0	12.2
Other Cheeses	01-046	Milk, 2% fat	302.0	1248.4	19.9	24.4	0.4	390.6	349.3	0.3	254.0	0.02	0.48	4.8	0.0	6.2
Unclassified Cheese	01-079		330.8	1368.0	19.7	24.8	7.3	578.8	462.6	0.8	276.3	0.02	0.44	4.7	0.0	7.0
Other Dairy Products			50.0	206.6	3.3	1.9	4.8	122.6	95.7	0.0	21.2	0.03	0.16	0.9	0.9	5.1
Eggs																
Grade A	01-123	Chicken, raw, average whole fresh and frozen	140.0	578.6	10.7	9.8	1.0	49.7	159.7	1.8	138.4	0.07	0.26	5.5	0.0	57.5
Other Grades and Sizes	01-123	Chicken, raw, average, whole fresh and frozen	140.0	578.6	10.7	9.8	1.0	49.7	159.7	1.8	138.4	0.07	0.26	5.5	0.0	57.5
Unclassified Eggs	01-123	Chicken, raw, average, whole fresh and frozen	140.0	578.6	10.7	9.8	1.0	49.7	159.7	1.8	138.4	0.07	0.26	5.5	0.0	57.5
Bakery Products ^e																
Bread	5459	White, enriched	271.1	1120.8	8.7	3.2	50.8	119.9	87.6	2.4	0.0	0.24	0.18	3.8	0.0	35.7
Cookies, Biscuits, Wafers	818	Chocolate chip cookies, commercial type	474.7	1962.6	5.4	21.1	70.2	39.3	114.9	1.8	36.2	0.03	0.07	0.4	0.0	9.4
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TABLE K.1. NUTRITIVE VALUE OF THE EDIBLE PORTION OF 100 g OF FOOD AS PURCHASED: FOOD SURVEY DATA (continued)

Commodity	Source	Specification	Food Energy	cal	kJ	Protein	Fat	Carbohydrate	Calcium	Phosphorus	Iron	Vitamin A	Thiamine	Riboflavin	Niacin	Ascorbic Acid	Total Folate
						g	g	g	mg	mg	mg	RE	mg	mg	NE	mg	µ
Crackers	916 Health and Welfare (374)	Saltines	458.1	1 894.0	9.1	9.1	73.3	18.3	90.7	0.9	0.0	0.00	0.00	0.00	2.6	0.0	16.2
Pastries, Pies	1566	Apple pie, baked, piecrust made with enriched flour	258.0	1 066.6	2.2	11.1	38.4	8.0	22.1	0.3	3.0	0.01	0.01	0.01	0.4	1.0	6.1
Cake, Chocolate Eclairs, Pudding	567	White cake, from mix, made with egg whites, water, chocolate icing	353.8	1 462.6	3.9	10.7	63.3	99.8	180.4	0.5	18.1	0.01	0.07	0.2	0.0	0.0	4.7
Rolls and Buns, Muffins, Crumpets	6903	Commercial plain rolls and buns, unenriched	300.3	1 241.7	8.2	5.6	53.4	127.0	85.6	1.4	0.0	0.26	0.14	3.5	0.0	0.0	35.7
Doughnuts	957	Cake type	393.7	1 627.7	3.1	18.9	50.4	40.9	191.5	1.2	28.3	0.15	0.16	1.2	0.0	0.0	8.2
Health and Welfare (377)																	
<i>Cereal Products</i> ^c																	
Baby Cereal	69	Mixed, enriched, dry	370.9	1 533.3	15.2	2.9	71.1	831.6	740.8	80.6	0.0	1.82	2.32	16.7	0.0	0.0	10.0
Breakfast Cereal Prepared		Weighted average wheat, corn, rice and oat types	359.8	1 487.5	6.8	1.3	80.1	30.8	159.5	9.6	0.0	1.31	2.44	14.7	0.0	0.0	29.1
Breakfast Cereal to be Cooked	1390	Oatmeal or rolled oats	393.1	1 625.1	14.3	7.4	68.7	53.4	408.2	4.5	0.0	0.59	0.14	4.0	0.0	0.0	56.5
Flour — Enriched	2439	Wheat, all purpose	366.8	1 516.6	10.5	1.0	76.7	16.1	87.6	2.9	0.0	0.44	0.26	5.6	0.0	0.0	21.4
Flour — Unenriched	2440	Wheat, all purpose	366.8	1 516.6	10.5	1.0	76.7	16.1	87.6	0.8	0.0	0.05	0.05	0.9	0.0	0.0	21.4
Mixes — Cake, Pastry	566	Dry form, white	437.4	1 808.4	4.1	12.0	79.0	151.2	272.1	0.2	0.0	0.01	0.07	0.3	0.0	0.0	0.0
Other Mixes — Pancake, Pudding, etc.	1458	Pancake and waffle mixes, plain and buttermilk	358.8	1 483.5	8.6	1.8	76.3	453.6	594.7	1.4	0.0	0.11	0.07	1.1	0.0	0.0	0.0
Pasta Products — Macaroni, Spaghetti	1301	Macaroni, unenriched	371.9	1 537.5	12.6	1.2	75.8	27.2	163.2	1.3	0.0	0.09	0.05	1.7	0.0	0.0	10.7
Rice	1877	White, raw, unenriched	365.9	1 512.6	6.7	0.4	81.0	24.1	94.7	0.8	0.0	0.07	0.03	1.6	0.0	0.0	29.0
Other Cereals	860	Corn flour	370.9	1 533.3	7.8	2.6	77.4	6.0	165.3	1.8	102.8	0.20	0.05	2.1	0.0	0.0	28.5
<i>Meat and Poultry</i>																	
SMI Beef	267	T-bone steak, average of choice and good grades	340.4	1 407.3	13.4	31.4	0.0	7.5	123.5	2.0	18.7	0.05	0.11	5.8	—	—	5.3
Loin Cuts	272	T-bone steak, good grade	324.6	1 342.2	13.6	29.5	0.0	7.9	125.9	2.0	18.6	0.06	0.12	5.8	—	—	5.3
Rump or Round Cuts	357A	Rump, average of choice and good grades	244.5	1 010.8	15.2	19.8	0.0	8.9	139.6	2.2	11.5	0.06	0.13	6.6	—	—	6.3
	362A	Rump, good grade	229.4	948.6	15.4	18.1	0.0	9.3	142.2	2.2	10.1	0.06	0.13	6.9	—	—	6.2

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TABLE K.1. NUTRITIVE VALUE OF THE EDIBLE PORTION OF 100 g OF FOOD AS PURCHASED: FOOD SURVEY DATA (continued)

Commodity	Source	Specification	Food Energy cal	kJ	Protein g	Fat g	Carbohydrate g	Calcium mg	Phosphorus mg	Iron mg	Vitamin A RE	Thiamine mg	Riboflavin mg	Niacin NE	Ascorbic Acid mg	Total Folate µ
Rib Cuts Shoulder Cuts	327A	Entire rib, choice grade	371.8	1 537.3	13.7	34.6	0.0	8.3	140.0	2.0	19.4	0.05	0.11	6.0	—	6.8
	223A	Chuck rib, average of choice and good grades	314.2	1 298.8	14.2	28.0	0.0	8.4	138.6	2.1	16.0	0.06	0.12	6.2	—	6.5
	228A	Chuck rib, good grade	256.5	1 060.6	14.8	21.4	0.0	8.4	137.1	2.2	12.7	0.06	0.13	6.4	—	6.2
	243	Flank steak, average of choice and good grades	142.6	589.7	21.8	5.4	0.0	26.2	203.6	3.2	3.0	0.09	0.18	9.0	—	6.0
Brisket, Flank	245	Flank steak, good grade	140.1	579.1	21.9	5.1	0.0	13.1	204.6	3.3	3.0	0.09	0.18	9.0	—	6.0
	247B	Hindshank, average of choice and good grades	266.1	1 100.0	19.1	20.4	0.0	11.6	176.4	2.9	12.0	0.07	0.16	8.6	—	7.4
	252B	Hindshank, good grade	240.9	996.0	19.8	17.3	0.0	12.0	183.4	3.0	9.0	0.07	0.16	8.5	—	7.4
	369	Raw, regular ground	270.1	1 117.3	18.0	21.3	0.0	10.0	157.2	2.7	12.0	0.07	0.16	7.4	—	7.7
Hamburger and Minced Beef Other Beef	214	Carcass trimmed to retail level, average of choice and good grades	241.6	998.8	15.3	19.5	0.0	9.0	142.2	2.3	11.5	0.06	0.13	6.6	—	6.3
	215	Carcass, trimmed to retail level, good grade	225.3	931.5	15.8	17.4	0.0	9.4	146.5	2.4	10.2	0.06	0.13	6.8	—	6.3
	214	Carcass, trimmed to retail level, average of choice and good grades	241.6	998.8	15.3	19.5	0.0	9.0	142.2	2.3	11.5	0.06	0.13	6.6	—	6.3
	215	Carcass, trimmed to retail level, good grade	225.3	931.5	15.8	17.4	0.0	9.4	146.5	2.4	10.2	0.06	0.13	6.8	—	6.3
Unspecified Beef	669B	Bacon or belly, raw, whole-sale cut, medium-fat class	592.7	2 450.2	8.2	61.8	0.0	5.0	76.6	1.2	0.0	0.39	0.09	4.0	—	2.1
	698B	Cuts trimmed to retail level, raw, medium-fat class	310.4	1 283.5	16.0	26.8	0.0	9.0	179.4	2.4	0.0	0.76	0.18	7.4	—	9.0
	749B	Picnic, medium-fat class	292.3	1 208.4	15.9	24.8	0.0	9.0	179.4	2.4	0.0	0.76	0.18	7.4	—	9.0
	715A	Fresh, medium-fat class	237.3	981.1	13.6	19.8	0.0	7.9	153.6	2.0	0.0	0.65	0.15	6.3	—	7.1
Ham, Fresh Shoulder Sausage Other Pork	1698A	Medium fat, with bone	263.8	1 090.8	13.6	22.8	0.0	7.7	152.5	2.0	0.0	0.65	0.16	6.3	—	7.7
	1675A	Fresh, medium-fat class	343.5	1 420.4	10.8	32.9	0.0	6.0	116.5	1.6	0.0	0.52	0.12	5.0	—	7.0
	2013	Links or bulk, raw	501.9	2 075.1	9.4	51.2	0.0	5.0	92.7	1.4	0.0	0.42	0.16	3.8	—	3.7
	1682A	Composite of trimmed lean cuts (ham, loin, shoulder, and spare-ribs), raw, medium-fat class	254.5	1 052.4	12.9	22.0	0.0	7.4	144.6	1.9	0.0	0.62	0.14	6.1	—	6.7
Unspecified Pork	1682A	Composite of trimmed lean cuts (ham, loin, shoulder, and spare-ribs), raw medium-fat class	254.5	1 052.4	12.9	22.0	0.0	7.4	144.6	1.9	0.0	0.62	0.14	6.1	—	6.7

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TABLE K.1. NUTRITIVE VALUE OF THE EDIBLE PORTION OF 100 g OF FOOD AS PURCHASED: FOOD SURVEY DATA (continued)

Commodity	Source	Specification	Food Energy cal	kJ	Protein g	Fat g	Carbohydrate g	Calcium mg	Phosphorus mg	Iron mg	Vitamin A RE	Thiamine mg	Riboflavin mg	Niacin NE	Ascorbic Acid mg	Total Folate μ
<i>Other Meat</i>																
Veal	2369A 2371A 1176	Chuck, average of medium-fat and thin classes Composite of cuts (leg, loin, rib and shoulder) trimmed to retail level, choice grade Average beef and calf, raw	124.4	580.8	15.6	6.4	0.0	8.4	124.4	2.3	—	0.11	0.20	8.6	—	4.1
Lamb and Mutton																
Liver — All Kinds, Excluding Chicken	1266	Average beef and calf, raw	222.6	920.6	13.9	18.0	0.0	9.1	161.2	1.0	—	0.12	0.16	7.0	—	3.7
Bologna	1268	All samples	141.1													
Wiener	1982	Frankfurters, raw, all samples	306.4	1 266.6	12.2	27.7	1.1	7.0	129.0	1.8	10 039.6	0.22	2.98	17.4	33.7	201.6
	1994	Potted (includes potted beef, chicken, and turkey)	311.4	1 287.5	12.6	27.8	1.8	7.0	134.0	1.9	—	0.16	0.20	4.4	—	5.0
Other Cooked Meats	2008 ^f		249.9	1 033.3	17.6	19.3	0.0	21.3	177.8	5.9	78.2	0.03	0.22	3.6	—	6.0
Canned Meats	1783 2006 2008	Average canned meats	246.9	1 020.8	17.0	18.9	0.7	6.7	88.7	1.6	0.0	0.29	0.20	5.0	0.0	4.3
Other — Heart, Game Kidney, etc.	1159 1110	Average, lean, raw beef heart, and raw beef kidney	119.9	496.0	16.3	5.2	0.8	8.0	208.6	5.7	107.3	0.44	1.71	10.6	8.5	42.2
Packaged Sliced Meats	2017	Salami, dry	453.6	1 875.1	24.0	38.4	1.2	14.1	285.2	4.9	—	0.37	0.24	8.6	—	9.3
<i>Poultry</i>																
Chicken	718C	Fresh, frozen, cut up, raw roaster	175.8	727.1	13.4	13.1	0.0	7.3	129.5	1.1	203.0	0.05	0.13	7.7	—	5.6
Turkey	2327C	All classes, total														
Other Poultry	FAO 206 961C	edible, raw Duck, domesticated, raw	160.4 269.4	663.3 1 114.0	14.8 13.2	10.8 23.6	0.0 0.0	24.2 8.2	129.5 ^g 145.4	3.2 1.3	181.4 272.1 ^h	0.05 0.06	0.07 0.15	3.0 5.9	—	7.4 9.4
<i>Fish</i>																
Cod, Fresh, Frozen, Smoked	794B	Raw, flesh only	78.6	325.1	17.7	0.3	0.0	10.0	195.5	0.4	0.0	0.05	0.07	4.9	2.0	18.6
Halibut, Fresh, Frozen	1103B	Atlantic and Pacific, raw, flesh only	100.8	416.6	21.0	1.2	0.0	13.1	212.6	0.7	133.0	0.07	0.07	11.8	0.0	12.4
Salmon, Fresh, Frozen, Smoked	1946B 1948B	Average, Atlantic and Chinook (King), raw, flesh only	221.2	914.6	20.9	14.6	0.0	79.6	245.4	0.9	93.7	0.09	0.15	6.9	9.0	26.6
Canned Salmon	1953 1955 1957	Average Cohoe, pink sockeye, solids and liquid, including bones	156.2 168.8	646.0 831.1	20.6 24.6	7.4 7.0	0.0 0.0	234.8 6.8	308.4 200.4	0.9 1.6	38.3 20.5	0.03 0.04	0.17 0.10	10.9 14.2	0.0 0.0	26.6 12.7
Canned Tuna	2324	Canned in oil drained solids														
Other Canned Fish and Seafood	1972	Sardines, Atlantic canned in oil, drained solids	167.8	693.7	19.8	9.1	0.0	361.2	412.4	2.4	54.5	0.02	0.16	7.6	0.0	12.8
Other Fish and Seafood	794B 1103B 1946B	Average, cod, halibut (Atlantic, Pacific) and Atlantic salmon, raw, flesh only	132.7	548.6	20.4	5.0	0.0	34.2	198.5	0.6	44.3	0.04	0.07	9.2	3.6	19.2

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TABLE K.1. NUTRITIVE VALUE OF THE EDIBLE PORTION OF 100 g OF FOOD AS PURCHASED: FOOD SURVEY DATA (continued)

Commodity	Source	Specification	Food Energy cal	kJ	Protein g	Fat g	Carbohydrate g	Calcium mg	Phosphorus mg	Iron mg	Vitamin A RE	Thiamine mg	Riboflavin mg	Niacin NE	Ascorbic Acid mg	Total Folate µ
Unspecified Fish	749B 1103B	Average cod, halibut (Atlantic, Pacific) and Atlantic salmon, raw, flesh only	132.7	548.6	20.4	5.0	0.0	34.2	198.5	1.0	44.3	0.04	0.07	9.2	3.6	19.2
<i>Fats and Oils</i>																
Margarine	1317	Vitamin A added	725.7	3 000.4	0.6	81.6	0.4	20.1	16.1	0.0	1 076.5 ^a	0.00	0.00	0.0	0.0	0.0
Vegetable Shortening	999	Cooking fats	891.1	3 683.7	0.0	100.8	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.0	0.0
Butter Spread, Low-Fat		Draft Diet Parkway														
Margarine Spread		Margarine	352.8	1 458.4	0.0	39.8	0.0	0.0	0.0	0.0	355.3 ^a	0.00	0.00	0.0	0.0	0.0
Lard	1241		909.2	3 758.6	0.0	100.8	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.0	0.0
Oil — Corn, Peanut, Olive	1401	Oils, salad or cooking	891.1	3 683.7	0.0	100.8	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.0	0.0
Salad Dressing and Mayonnaise	1932 1938 1940 1498	Average, fresh, mayonnaise, Thousand Island dressing	547.7	2 264.2	0.8	56.7	11.8	13.4	19.8	0.5	90.7	0.01	0.03	0.0	2.8	0.3
Peanut Butter		Small amounts of added fat, sweetener, and salt	586.6	2 425.3	25.7	49.8	19.6	61.4	398.1	2.0	—	0.11	0.11	20.9	0.0	79.6
Other Fats and Oils	1401	Oils, salad or cooking	891.1	3 683.7	0.0	100.8	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.0	0.0
<i>Beverages</i>																
Coffee, Regular	799 ^j	Regular ground, roasted	52.0	214.8	0.0	0.0	14.1	72.1	154.4	2.2	0.0	0.00	0.08	12.3	0.0	0.0
Coffee, Instant	799	Instant (water-soluble solids) dry powder	130.0	537.5	0.0	0.0	35.2	180.4	386.0	5.6	0.0	0.00	0.20	30.8	0.0	0.0
Tea, Instant Iced Tea Mix	2276	Instant (water-soluble solids), carbohydrate added, dry powder	296.5	1 226.0	0.0	0.0	80.6	11.0	0.0	1.6	0.0	0.00	0.94	8.9	0.0	0.0
Soft Drinks	404	Cola-type, carbonates, non-alcoholic	39.3	162.4	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.0	0.0
Other Non-Alcoholic Drinks		Koolaid	54.4	224.8	0.0	0.0	14.1	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.0	0.0
<i>Miscellaneous Groceries</i>																
Candy, Gum Chocolate, Marshmallows	586 607	Average sweet chocolate, gum drops, and starch jelly pieces	441.0	1 823.1	2.2	18.0	73.2	50.4	71.5	0.9	1.5	0.01	0.07	0.1	0.0	6.0
Sugar, All Kinds	2230	Granulated beet or cane	388.0	1 604.4	0.0	0.0	100.2	0.0	0.0	0.1	0.0	0.00	0.00	0.0	0.0	0.0
Canned Puddings, Food Powder	1827	Chocolate instant pudding mix with starch base	359.8	1 487.7	3.1	1.6	91.5	246.9	88.7	2.0	0.0	0.01	0.05	0.3	0.0	0.0
Molasses, Honey, Syrup	1134 1342															
Preserves, Jams, Marmalade	2051 1148 1318	Average Average, marmalade, jams and preserves	290.6	1 201.5	0.1	0.0	76.3	99.4	24.2	1.5	0.0	0.02	0.07	0.1	0.3	0.5
Salt, Spices, Mustard	1963	Salt, table	266.6	1 102.2	0.5	0.1	70.6	27.7	9.0	0.8	1.5	0.01	0.02	0.1	4.0	8.0
			0.0	0.0	0.0	0.0	0.0	255.0	0.0	0.1	0.0	0.00	0.00	0.0	0.0	0.0

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TABLE K.1. NUTRITIVE VALUE OF THE EDIBLE PORTION OF 100 g OF FOOD AS PURCHASED: FOOD SURVEY DATA (continued)

Commodity	Source	Specification	Food Energy cal	kJ	Protein g	Fat g	Carbohydrate g	Calcium mg	Phosphorus mg	Iron mg	Vitamin A RE	Thiamine mg	Riboflavin mg	Niacin mg	Ascorbic Acid mg	Total Folate μ
Pickles, Relish, Olives, Vinegar	1558 to 1565	Average of dill, fresh (bread-and-butter), sweet and sour cucumber pickles, sweet and sour chowchow and sweet and sour relish	68.2	282.2	0.8	0.6	15.9	24.0	23.6	1.6	10.8	0.00	0.02	0.0	6.9	0.0
Catsup, Chili Sauce, Gravy Mixes	2286	Tomato catsup, bottled	106.8	441.7	2.0	0.4	25.6	22.1	50.4	0.8	141.1	0.09	0.07	1.6	15.1	14.9
Soup, Canned, Ready to Serve	2078	Chicken noodle, condensed commercial	53.4	220.8	2.8	1.6	6.6	7.0	30.2	0.4	3.0	0.01	0.01	0.7	0.0	2.0
Soup, Dehydrated	2115	Dehydrated onion soup mix, commercial	351.8	1 454.4	14.0	10.6	54.3	97.7	113.9	1.4	6.0	0.11	0.07	0.7	15.1	0.0
Baby Food, Canned or Bottled	75 92	Average beef noodle dinner and applesauce, canned	60.4	250.0	1.5	0.6	12.8	8.0	18.1	0.4	64.5	0.01	0.03	0.6	1.0	1.8
Fruit Drink Crystals	329	Tang	54.8	226.8	0.0	0.0	14.2	0.0	0.0	0.0	0.0	0.00	0.00	0.0	16.2 ^c	0.0
Health and Welfare	761	Average, Whipped cream substitute and fudge-type chocolate syrup	302.4	1 250.2	4.0	18.0	36.2	80.6	80.1	0.6	108.3	0.02	0.12	0.2	0.0	1.0
Non-Dairy Substitutes, Sunday Sauce	4068	Mayonnaise, commercial	438.4	1 812.6	1.0	42.6	14.5	14.1	26.2	0.2	66.5	0.01	0.03	0.0	0.0	1.0
Sandwich Spreads	1940															
<i>Canned and Dried Fruits</i>																
Canned Peaches	1483	Heavy syrup pack	78.6	325.1	0.4	0.1	20.2	4.0	12.0	0.3	43.3	0.01	0.01	0.6	3.0	3.3
Canned Pears	1507	Heavy syrup pack	76.6	316.6	0.2	0.2	19.7	5.0	7.0	0.2	0.0	0.01	0.01	0.1	1.0	11.4
Canned Pineapples	1616	Heavy syrup pack	74.6	308.4	0.3	0.1	19.5	11.1	5.0	0.3	5.0	0.07	0.01	0.2	7.0	10.6
Canned Cherries	671B	Sweet, without pits, heavy syrup pack	81.6	337.5	0.9	0.2	20.6	15.1	13.1	0.3	6.0	0.01	0.01	0.2	3.0	7.5
Canned Plums	1645	Heavy syrup pack	83.6	345.7	0.4	0.1	21.7	9.0	10.0	0.9	121.9	0.01	0.01	0.4	2.0	3.5
Canned Fruit Cocktail	1023	Heavy syrup pack	76.6	316.6	0.4	0.1	19.8	9.0	12.0	0.4	14.1	0.01	0.01	0.4	2.0	0.9
Other Canned Fruit, Pie Filling	1027	Fruit salad, heavy syrup pack	75.6	312.4	0.3	0.1	19.5	8.0	11.1	0.3	45.3	0.01	0.03	0.6	2.0	0.9
Unspecified Canned Fruit	1023	Fruit cocktail, heavy syrup pack	76.6	316.6	0.4	0.1	19.8	9.0	12.0	0.4	14.1	0.01	0.01	0.4	2.0	0.9
Canned Apple Juice	27	Canned or bottled, fortified	47.3	195.7	0.1	0.0	12.0	6.0	9.0	0.6	9.0 ^h	0.01	0.01	0.1	35.2 ^c	0.5
Canned Orange Juice	1432	Weighted average of canned sweetened and unsweetened	49.0	202.6	0.8	0.2	11.4	10.0	18.1	0.4	20.1	0.07	0.01	0.3	40.3	13.0
Other Canned or Bottled Fruit Juice	1433	Grape juice, fortified	66.5	275.1	0.2	0.0	16.7	11.1	12.0	0.3	8.0	0.03	0.01	0.2	15.9 ^c	1.4
Unspecified Canned Fruit Juice	1079	Grapefruit and orange juice, unsweetened, canned	43.3	179.3	0.6	0.2	10.1	10.0	15.1	0.3	10.0	0.05	0.01	0.2	34.2	8.7
Raisins	1846	Natural, unbleached	291.3	1 204.2	2.5	0.2	78.0	62.4	101.8	3.5	2.0	0.11	0.07	0.5	1.0	3.8
Other Dried and Preserved Fruit	1818B	Prunes, dried, medium	218.4	903.3	1.8	0.5	57.7	57.5	67.6	3.3	137.0	0.07	0.14	1.3	2.5	3.7
<i>Canned and Dried Vegetables</i>																
Canned Peas	1517	Green, immature, regular pack	66.5	275.1	3.5	0.3	12.6	20.1	66.5	1.7	45.3	0.09	0.05	0.9	9.0	22.5

- continued -

TABLE K.1. NUTRITIVE VALUE OF THE EDIBLE PORTION OF 100 g OF FOOD AS PURCHASED: FOOD SURVEY DATA (continued)

Commodity	Source	Specification	Food Energy	cal	kJ	Protein	Fat	Carbohydrate	Calcium	Phosphorus	Iron	Vitamin A	Thiamine	Riboflavin	Niacin	Ascorbic Acid	Total Folate
						g	g	g	mg	mg	mg	RE	mg	mg	NE	mg	µ
Canned Corn, Kernel or Creamed	847	Average cream style and vacuum-pack, whole kernel	83.1	343.7		2.3	0.5	20.4	3.0	65.0	0.5	34.2	0.03	0.05	1.1	5.0	23.0
Canned Baked Beans	156	With pork and tomato sauce	122.9	508.4		6.1	2.6	19.1	54.4	92.7	1.8	13.1	0.07	0.03	1.6	2.0	24.0
Other Canned Beans	185	Average green and yellow beans, regular pack	18.6	77.1		1.0	0.1	4.2	34.2	21.1	1.2	17.6	0.03	0.03	0.4	4.5	33.7
Canned Tomatoes	2284	Ripe, regular pack	21.1	87.5		0.9	0.1	4.3	6.0	19.1	0.5	90.7	0.05	0.03	0.7	17.1	3.0
Other Canned Vegetables	621	Carrots, regular pack	28.2	116.6		0.6	0.2	6.5	25.2	20.1	0.7	1 008.0	0.01	0.01	0.4	2.0	10.0
Unspecified Canned Vegetables		Average carrots, corn, peas, beans	49.1	203.1		1.8	0.3	10.9	20.6	43.2	1.0	276.3	0.04	0.04	0.7	5.1	22.3
Canned Tomato Juice	2288	Canned or bottled, regular pack	19.1	79.1		0.9	0.1	4.3	7.0	18.1	0.9	80.6	0.05	0.03	0.8	16.1	10.7
Other Vegetable Juices	2396	Vegetable juice cocktail, canned	17.1	70.8		0.9	0.1	3.6	12.0	22.1	0.5	70.5	0.05	0.03	0.8	9.0	16.0
Dried Vegetables	154	Mature beans, white, raw	342.7	1 416.6		22.4	1.6	61.8	145.1	428.4	7.8	0.0	0.64	0.22	7.0	0.0	131.0
Unspecified Beans	176	Lima beans, mature seeds, dry, raw	347.7	1 437.5		20.5	1.6	64.5	72.5	388.0	7.8	0.0	0.48	0.16	5.1	0.0	114.2
<i>Fresh Fruits</i>																	
Oranges	1420	All varieties, raw	36.0	149.1		0.7	0.1	8.9	30.1	14.7	0.2	14.7	0.07	0.02	0.2	36.8	17.6
Bananas	141A	Raw, common, good quality	57.4	237.3		0.7	0.1	15.0	5.4	17.5	0.4	12.8	0.03	0.03	0.6	6.7	13.8
Apples	13A	Freshly harvested and stored, not pared	46.7	193.3		0.1	0.4	11.6	5.6	8.0	0.2	7.2	0.02	0.01	0.0	3.2	4.6
Grapefruit	1053	Raw, all varieties	20.6	85.3		0.2	0.0	5.3	8.0	8.0	0.2	4.0	0.01	0.01	0.1	19.1	5.0
Strawberries	2217A	Raw, good quality	35.8	148.0		0.6	0.4	8.1	20.3	20.3	0.9	5.8	0.02	0.06	0.5	57.0	15.4
Raspberries	1849	Raw, red	55.7	230.4		1.1	0.4	13.2	21.5	21.5	0.8	12.7	0.02	0.08	0.8	24.4	4.9
Grapes	1084A	American type, Niagara, Concord, good quality, raw	43.8	181.1		0.8	0.6	9.9	10.1	7.6	0.2	6.3	0.03	0.01	0.01	2.5	3.1
Peaches	1479A	Raw, peeled fruit	33.3	137.7		0.5	0.0	8.5	7.8	16.6	0.4	116.6	0.01	0.04	0.8	6.1	2.9
Melons	2424	Watermelon, raw	13.1	54.2		0.2	0.1	3.2	3.5	5.0	0.2	29.7	0.01	0.01	0.1	3.5	0.0
Cherries	662	Weighted average of sweet and sour	59.3	245.3		1.1	0.2	14.7	20.1	17.4	0.3	45.5	0.04	0.07	0.3	9.1	6.8
Plums	1639	Raw, Damsen	60.5	250.2		0.4	0.0	16.3	16.5	15.6	0.4	27.5	0.07	0.02	0.4	5.0 ^h	3.2
Pears	1502A	Raw, good quality	55.9	231.3		0.6	0.3	14.0	7.3	10.1	0.2	1.8	0.01	0.03	0.1	3.6	10.3
Other Fresh Fruit	1611	Pineapples, raw	27.2	112.6		0.2	0.1	7.1	8.9	4.2	0.2	3.6	0.04	0.01	0.1	8.9	5.5
<i>Fresh Vegetables</i>																	
Potatoes	1785	Raw	62.0	256.4		1.7	0.0	13.9	5.7	43.2	0.4	0.0	0.08	0.03	1.4	16.3	10.6
Tomatoes	2282A	Ripe, raw, whole	22.1	91.7		1.1	0.2	4.7	13.1	27.2	0.5	90.7	0.05	0.03	0.8	23.1	5.6
Lettuce	1258A	Iceberg, good quality	12.4	51.5		0.8	0.0	2.7	19.1	21.0	0.4	31.6	0.05	0.05	0.2	5.7	22.9
Carrots	619C	Raw, without tops	34.7	143.5		0.9	0.1	8.0	30.5	29.7	0.5	909.2	0.04	0.04	0.5	6.6	15.1
Celery	637	Raw, green	12.8	53.1		0.6	0.0	2.9	29.4	21.1	0.2	18.1	0.02	0.02	0.3	6.8	8.6
Onions, Regular and Spanish	1412	Raw	34.8	144.2		1.3	0.0	7.9	24.7	33.0	0.4	3.6	0.02	0.03	0.4	9.1	15.1
Cabbage	512A	Common, raw, trimmed	21.7	90.0		1.4	0.1	4.8	44.4	26.3	0.3	11.8	0.04	0.04	0.3	42.6	27.2

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TABLE K.1. NUTRITIVE VALUE OF THE EDIBLE PORTION OF 100 g OF FOOD AS PURCHASED: FOOD SURVEY DATA (continued)

Commodity	Source	Specification	Food Energy	Protein	Fat	Carbohydrate	Calcium	Phosphorus	Iron	Vitamin A	Thiamine	Riboflavin	Niacin	Ascorbic Acid	Total Folate
			cal	g	g	g	mg	mg	mg	RE	mg	mg	NE	mg	μ
Cauliflower Turnips Beans	630B	Raw, untrimmed	10.6	44.0	1.0	0.0	3.1	9.8	27.8	0.4	2.3	0.04	0.03	0.4	30.6
	2352C	Raw, without tops, good quality	26.0	107.5	0.8	0.1	5.7	33.8	32.1	0.4	0.0	0.03	0.05	0.5	31.2
	182	Average, raw, green and yellow	26.1	108.2	1.6	0.1	5.8	49.6	38.5	0.7	37.7	0.07	0.09	0.6	17.2
	844A	Raw, sweet, white and yellow, with husks	34.8	144.0	1.2	0.3	8.0	1.0	40.2	0.2	14.5	0.05	0.04	0.7	4.3
Cucumbers	942	Raw, not pared	14.3	59.3	0.8	0.0	3.2	23.9	25.8	1.0	23.7	0.02	0.03	0.2	10.5
Mushrooms	1354A	Raw, good quality	27.3	113.1	2.6	0.2	4.3	5.8	113.4	0.7	0.0	0.09	0.44	4.2	2.9
Other Root and Gourd Vegetables	2205	Average trimmed beets and butternut squash	34.2	141.5	1.0	0.0	8.4	17.0	32.1	0.5	202.0	0.02	0.05	0.4	6.7
Other Leaf and Stalk Vegetables	483A	Average broccoli spears and Brussels sprouts	33.4	138.2	3.6	0.3	6.1	57.1	67.7	1.1	123.7	0.08	0.16	1.0	91.7
Frozen Foods															
Frozen Strawberries	2220	Whole, sweetened	92.7	383.3	0.4	0.2	23.6	13.1	16.1	0.6	3.0	0.01	0.05	0.5	55.4
Frozen Raspberries	1852	Sour, red, sweetened	98.7	408.4	0.7	0.2	24.8	13.1	17.1	0.6	7.0	0.01	0.05	0.6	21.1
Other Frozen Fruits	674	Cherries, sour, red, sweetened	112.8	466.6	1.0	0.4	28.0	12.0	15.1	0.5	48.3	0.03	0.05	0.3	6.0
Frozen Orange Juice	1436	Concentrate, unsweetened	159.2	658.4	2.3	0.2	38.3	33.2	55.4	0.4	71.5	0.29	0.05	1.2	159.2
Other Frozen Juice	297	Orange and grapefruit, diluted													104.0
Health and Welfare															
Frozen Peas	1529		44.7	184.8	0.4	0.0	10.5	8.1	0.0	0.0	10.9	0.06	0.00	0.3	41.4
Frozen Green Beans	191	Snap, cut	73.5	304.2	5.4	0.3	12.9	20.1	90.7	2.0	68.5	0.31	0.09	2.0	19.1
Frozen Potatoes	1805	French-fried	26.2	108.2	1.7	0.1	6.0	42.3	33.2	0.8	58.4	0.07	0.09	0.4	9.0
Frozen Corn	856	Kernels cut off cob	171.3	708.4	2.8	6.5	26.3	7.0	67.5	1.4	0.0	0.14	0.01	2.1	20.1
Other Frozen Vegetables	485	Average, chopped broccoli and leaf spinach	82.6	341.7	3.1	0.5	19.8	3.0	78.6	0.8	35.2	0.11	0.07	1.6	8.0
Frozen Fruit Pies	2179		27.2	112.4	3.1	0.3	4.7	82.1	52.4	1.6	539.2	0.08	0.14	0.5	53.0
Frozen Cakes	1566	Average baked apple pie and baked cherry pie, piecrust													
	1571	made with unenriched flour	260.5	1 077.3	2.4	11.2	38.5	11.1	23.6	0.3	23.6	0.01	0.01	0.4	0.5
	547	Average devil's food with and without whipped-cream filling	378.5	1 564.6	4.4	19.9	50.0	67.5	107.8	0.7	105.8	0.01	0.07	0.2	0.0
Frozen Meat and Poultry Dinners	1635	Average, commercial plate dinners	109.8	454.2	10.8	3.1	9.4	18.1	82.1	1.3	12.0	0.06	0.09	4.0	4.5

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TABLE K.1. NUTRITIVE VALUE OF THE EDIBLE PORTION OF 100 g OF FOOD AS PURCHASED: FOOD SURVEY DATA (concluded)

Commodity	Source	Specification	Food Energy	cal	kJ	Protein	Fat	Carbohydrate	Calcium	Phosphorus	Iron	Vitamin A	Thiamine	Riboflavin	Niacin	Ascorbic Acid	Total Folate
						g	g	g	mg	mg	mg	RE	mg	mg	NE	mg	μ
<i>Prepared and Partially Prepared Dishes</i>																	
Macaroni Dishes	382	Macaroni and cheese															
	Health and Welfare (1305)																
Instant Mashed Potatoes	1797	Dehydrated, mashed, flakes without milk	197.0	814.4		8.2	11.0	20.1	182.3	76.6	0.9	130.5	0.09	0.20	0.4	0.0	8.4
Coleslaw	802	Made with commercial French dressing	366.9	1 516.8		7.2	0.6	84.6	35.2	174.3	1.7	0.0	0.22	0.05	5.4	32.2	0.0
Snack Foods	1809	Average, potato chips,	95.7	395.7		1.2	7.3	7.6	42.3	26.2	0.4	11.0	0.03	0.03	0.3	29.2	24.2
	4080	corn snacks	471.7	1 950.2		6.6	21.3	63.9	23.1	140.7	1.8	51.4	0.31	0.10	3.1	8.0	24.0

—No suitable value found but measurable amount may be present.

^a USDA, *Composition of Foods . . . Raw, Processed, Prepared*.

^b Factors used for the nutrient values of condensed and evaporated milk are those of evaporated milk, as its consumption is approximately 15 times that of condensed milk.

^c Added by manufacturer according to Food and Drug Regulations.

^d Figures used for sour cream are those of light coffee or table cream (01-050).

^e It is assumed that all bakery and cereal products are made with unenriched flour unless otherwise stated. When enriched, product contains added iron, thiamine, riboflavin, and niacin.

^f Figures used for calcium, phosphorus, iron, and vitamin A are the average of canned corned beef and canned chicken from Health and Welfare Canada's *Nutritive Value of Some Common Foods*.

^g The figure used is that for roaster chicken.

^h FAO, *Food Composition Tables*.

ⁱ The value for instant coffee times 0.4.

Source: *Nutrition Canada Survey Food-Nutrient Conversion File* (based on Handbook No. 8, USDA, with additional Canadian foods), unless otherwise specified.

APPENDIX L

DETAILED COMPONENTS FOR THE COMMODITY GROUPS FOR FOOD DISAPPEARANCE AND FOOD SURVEY DATA

Tables L.1 and L.2

TABLE L.1. DETAILED COMPONENTS FOR THE COMMODITY GROUPS FOR FOOD DISAPPEARANCE DATA*Cereals*

Wheat Flour
Rye Flour
Oatmeal and Rolled Oats
Pot and Pearl Barley
Corn Flour and Meal
Buckwheat Flour
Rice
Breakfast Food

Sugar and Syrups

Sugar
Maple Sugar
Honey
Other

Pulses and Nuts

Dry Beans
Baked Canned Beans
Dry Peas
Peanuts
Tree Nuts

Fats and Oils

Margarine
Lard
Shortening and Shortening Oils
Salad Oils
Butter

Other Fruits

Peaches, Frozen
Pears, Fresh
Spinach, Frozen
Asparagus, Fresh
Asparagus, Canned
Asparagus, Frozen
Beans, Green and Wax, Fresh
Beans, Canned
Beans, Frozen
Lima Beans, Frozen
Beets, Fresh
Beets, Canned
Broccoli, Fresh
Broccoli, Frozen
Brussels Sprouts, Fresh
Brussels Sprouts, Frozen
Carrots, Fresh
Carrots, Canned
Carrots, Frozen
Cauliflower, Fresh
Cauliflower, Frozen
Celery, Fresh
Corn, Fresh
Corn, Canned
Corn, Frozen
Cucumbers, Fresh
Onions, Not Processed
Parsnips, Fresh

Peas, Fresh
Peas, Canned
Peas, Frozen
Peppers, Fresh
Pumpkin and Squash, Canned
Radishes, Fresh
Rutabagas, Fresh
Unspecified Fresh Vegetables^a
Unspecified Canned Vegetables
Unspecified Frozen Vegetables^a

Mushrooms

Mushrooms, Fresh
Mushrooms, Canned

Potatoes

Potatoes, White
Sweet Potatoes

Meat

Pork
Beef
Veal
Mutton and lamb
Offal
Canned Meats

Eggs

Eggs

Poultry

Chicken
Fowl
Turkey
Duck
Goose

Fish

Fish, Shellfish, Fresh and Frozen
Fish Cured (Smoked, Salted, Pickled)
Fish and Shellfish, Canned

Dairy Products

Cheddar Cheese
Process Cheese
Other Cheese
Cottage Cheese
Evaporated Whole Milk
Condensed Whole Milk
Evaporated Partly Skimmed Milk
Powdered Whole Milk
Powdered Skim Milk
Powdered Buttermilk
Powdered Whey
Fluid Whole Milk

Beverages

Tea^a
Coffee
Cocoa

^a Not included in study as representative nutrient values were not available.

TABLE L.2: DETAILED COMPONENTS FOR THE COMMODITY GROUPS FOR SURVEY DATA*Dairy Products**Milk*

Fresh Milk, Homogenized, Whole
 Low Fat Milk, 2%, 1%
 Skim Milk
 Chocolate Milk
 Unspecified Milk

Other Dairy Products

Buttermilk
 Condensed and Evaporated Milk
 Powdered Milk
 Half and Half, Cereal Cream
 Cream-Fresh, Whipping, Table
 Ice Cream, Sherbet, Iced Milk
 Sour Cream, Chip Dips
 All Other Cream
 Yoghurt
 Butter
 Cheddar Cheese
 Packaged Process Cheese, Spreads
 Cottage Cheese
 Other Cheeses
 Unclassified Cheese
 Other Dairy Products

Eggs

Eggs, Grade A, Extra Large and Large
 Other Grades and Sizes
 Unclassified

Bakery Products

Bread
 Cookies, Biscuits, Wafers
 Crackers
 Pastries, Pies
 Cakes, Chocolate Eclairs, Puddings
 Rolls and Buns, Muffins, Crumpets
 Doughnuts
 Other Bakery Products^a

Cereal Products

Baby Cereal
 Breakfast Cereal Prepared
 Breakfast Cereal To be Cooked
 Flour
 Mixes — Cake, Pastry
 Other Mixes — Pancake, Pudding, etc.
 Pasta Products — Macaroni, Spaghetti
 Rice
 Other Cereals

*Meat and Poultry**Beef*

Loin Cuts
 Round or Rump Cuts
 Rib Cuts
 Shoulder Cuts
 Brisket, Flank
 Stewing Beef
 Hamburger, Minced Beef
 Other Beef
 Unspecified Beef

Pork

Bacon
 Ham Smoked, Cooked and Uncooked
 Cottage Roll, Smoked Picnic
 Loin, Fresh
 Ham, Fresh
 Shoulder, Fresh
 Sausage
 Other Pork
 Unspecified Pork

Other Meats

Veal
 Lamb and Mutton
 Liver — All Kinds (except chicken)
 Bologna
 Weiners
 Other Cooked Meats
 Canned Meats
 Other — Heart, Game, Kidney, etc.
 Packaged Sliced Meats

Poultry

Chicken, Fresh, Frozen, Cut up
 Turkey, Fresh, Frozen, Cut up
 Other Poultry

Fish

Cod, Fresh, Frozen, Smoked
 Halibut, Fresh, Frozen
 Salmon, Fresh, Frozen, Smoked
 Canned Salmon
 Canned Tuna
 Other Canned Fish and Seafood
 Other Fish and Seafood
 Unspecified Fish

Fats and Oils

Margarine
 Vegetable Shortening
 Butter Spread, Low-Fat Margarine Spread
 Lard
 Oil-Corn, Peanut, Olive, etc.
 Salad Dressing, and Mayonnaise
 Peanut Butter
 Other Fats and Oils

Beverages

Coffee, Regular
 Coffee, Instant
 Tea Bags^a
 Tea, Instant, Iced Tea Mix
 Other Tea^a
 Unspecified Tea^a
 Soft Drinks
 Other Non-Alcoholic Drinks

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TABLE L.2: DETAILED COMPONENTS FOR THE COMMODITY GROUPS FOR SURVEY DATA (concluded)*Miscellaneous Groceries*

Candy, Gum, Chocolate, Marshmallows
 Sugar, All Kinds
 Canned Puddings, Food Powders
 Molasses, Honey, Syrup
 Preserves, Jams, Marmalade
 Baking Supplies^a
 Salt, Spices, Mustard
 Pickles, Relishes, Olives, Vinegar
 Catsup, Chili Sauce, Gravy Mixes
 Soup, Canned, Ready to Serve
 Soup, Dehydrated
 Baby Food, Canned and Bottled
 Fruit Drink Crystals
 Non-Dairy Substitutes, Sundae Sauce
 Sandwich Spreads

Canned and Dried Fruits

Canned Peaches
 Canned Pears
 Canned Pineapple
 Canned Cherries
 Canned Plums
 Canned Fruit Cocktail
 Other Canned Fruits, Pie Fillings
 Unspecified Canned Fruits
 Canned Apple Juice
 Canned Orange Juice
 Other Canned or Bottle Fruit Juice
 Unspecified Canned Fruit Juice
 Raisins
 Other Dried and Preserved Fruits

Canned and Dried Vegetables

Canned Peas
 Canned Corn, Kernel or Creamed
 Canned Baked Beans
 Other Canned Beans
 Canned Tomatoes
 Other Canned Vegetables
 Unspecified Canned Vegetables
 Canned Tomato Juice
 Other Vegetable Juices
 Dried Vegetables
 Unspecified Beans

Fresh Fruits

Oranges
 Bananas
 Apples
 Grapefruits
 Strawberries
 Raspberries
 Grapes
 Peaches
 Melons
 Cherries
 Plums
 Pears
 Other Fresh Fruits
 Unspecified Fresh Fruits^a

Fresh Vegetables

Potatoes
 Tomatoes
 Lettuce
 Carrots
 Celery
 Onions, Regular and Spanish
 Cabbage
 Cauliflower
 Turnips
 Beans, Green and Yellow
 Corn
 Cucumbers
 Mushrooms
 Other Root and Gourd Vegetables
 Other Leaf and Stalk Vegetables
 Unspecified Fresh Vegetables^a

Frozen Foods

Frozen Strawberries
 Frozen Raspberries
 Other Frozen Fruits
 Frozen Orange Juice
 Other Frozen Juices
 Frozen Peas
 Frozen Green Beans
 Frozen Potatoes
 Frozen Corn
 Other Frozen Vegetables
 Frozen Fruit Pies
 Frozen Cakes
 Other Frozen Desserts and Specialties^a
 Frozen Fish Dinners^a
 Frozen Meat and Poultry Dinners
 Frozen Chinese and Italian Foods^a
 Other Frozen Foods^a

Prepared and Partially Prepared Dishes

Macaroni Dinners, etc.
 Meat and Poultry Dinners^a
 Instant Mashed Potatoes
 Chinese Dinners^a
 Salads, Coleslaw
 Snack Foods
 Carried out of Restaurants and Stores^a
 Other^a

Total Food Prepared at Home Board, by Family Members^b

Food and Beverages in Eating Places

Breakfasts
 Lunches
 Dinners
 Snacks
 Soft Drinks
 Other Non-Alcoholic Beverages
 Chocolate Bars, Candy

^a Not included in study as representative nutrient values were not available.

^b Not included as only food prepared at home was considered.

APPENDIX M

CONVERSION TABLE FOR FOOD SURVEY DATA

Table M.1

TABLE M.1. CONVERSION TABLE FOR FOOD SURVEY DATA

Item	Refer- ences	Unit in Data	100 g Equiv- alent	Item	Refer- ences	Unit in Data	100 g Equiv- alent
100 — fresh milk, homogenized	2	qt.	0.086	504 — other tea		oz.	0.272
101 — low fat milk	2	"	0.085	505 — unspecified tea		"	"
102 — skim milk	2	"	0.085	506 — soft drinks		"	"
103 — chocolate milk	2	"	0.084	507 — other non-alcoholic drinks		"	"
104 — unspecified milk	2	"	0.085	510 — candy		"	"
110 — buttermilk	2	"	0.085	512 — canned puddings		"	"
111 — condensed and evaporated milk		oz.	0.318	513 — molasses, honey		"	"
113 — half and half		pint	0.172	514 — preserves		"	"
114 — cream		"	0.174	515 — baking supplies		"	"
115 — ice cream		"	0.315	516 — salt, spices		"	"
116 — sour cream		"	0.181	517 — pickles		"	"
all other cream		oz.	0.272	518 — catsup		"	"
117 — yoghurt		"	"	519 — canned soup		"	"
120 — processed cheese		"	"	520 — dehydrated soup		"	"
122 — other cheese		"	"	521 — baby food		"	"
123 — unclassified cheese		"	"	522 — fruit drink		"	"
124 — other dairy products		"	"	523 — non-dairy substitutes		"	"
				525 — sandwich spread		"	"
140 — eggs, A large	3	doz.	0.147	600 — canned peaches		"	"
141 — other grades		"	0.167	601 — canned pears		"	"
142 — unclassified eggs		"	0.157	602 — canned pineapple		"	"
200 — bread		oz.	0.272	603 — canned cherries		"	"
201 — cookies		"	"	604 — canned plums		"	"
202 — crackers		"	"	605 — canned fruit cocktail		"	"
203 — pastries		"	"	606 — other canned fruit		"	"
204 — cakes		"	"	607 — unspecified canned fruit		"	"
205 — rolls and buns		"	"	608 — canned apple juice	1	"	0.318
206 — doughnuts	2	doz.	0.259	609 — canned orange juice	1	"	"
207 — other bakery products		oz.	0.272	610 — other fruit juice	1	"	"
220 — baby cereal		"	"	611 — unspecified fruit juice	1	"	"
221 — prepared cereal		"	"	612 — raisins		"	"
222 — cereal to be cooked		"	"	613 — other dried fruit		"	"
224 — mixes - cake		"	"	620 — canned peas		"	0.272
225 — other mixes		"	"	621 — canned corn		"	"
227 — rice		"	"	622 — canned baked beans		"	"
228 — other cereal		"	"	623 — other canned beans		"	"
383 — canned salmon		"	"	624 — canned tomatoes		"	"
384 — canned tuna		"	"	625 — other canned vegetables		"	"
385 — other canned fish		"	"	626 — unspecified canned vegetables		"	"
386 — other fish		"	"	627 — canned tomato juice	1	"	0.318
402 — butter spread		"	"	628 — other vegetable juices	1	"	"
404 — oil		"	"	629 — dried vegetables		"	0.272
405 — salad dressing		"	"	630 — unspecified beans		"	"
406 — peanut butter		"	"	700 — oranges	2	doz.	0.046
407 — other fats and oils		"	"	703 — grapefruit	2	each	0.208
501 — coffee, instant		"	"	704 — strawberries	1	pint	0.350
502 — tea bags		"	"	705 — raspberries	1	"	"
503 — tea, instant		"	"	707 — peaches	1	"	"
					(average 6 qt = 4.08 kg)	"	0.29

- continued -

TABLE M.1. CONVERSION TABLE FOR FOOD SURVEY DATA (concluded)

Item	Refer- ences	Unit in Data	100 g Equiv- alent	Item	Refer- ences	Unit in Data	100 g Equiv- alent
708 — melons	2 (canta- loupe)	each	0.130	807 — frozen potatoes		oz.	0.272
722 — lettuce		"	0.272	808 — frozen corn		"	"
724 — celery		"	"	809 — other frozen vegetables		"	"
727 — cauliflower		"	"	810 — frozen fruit pies		"	"
730 — corn	2	oz.	0.060	811 — frozen cakes		"	"
731 — cucumbers		oz.	0.272	812 — other frozen desserts		"	"
734 — other leaf and stalk vegetables		"	"	813 — frozen fish dinners		"	"
735 — unspecified fresh vegetables		"	"	814 — frozen meat dinners		"	"
800 — frozen strawberries		"	"	815 — frozen Chinese food		"	"
801 — frozen raspberries		"	"	816 — other frozen foods		"	"
802 — other frozen fruits		"	"	900 — macaroni dinners		"	"
803 — frozen orange juice	3	"	0.227	901 — meat and poultry dinners		"	"
804 — other frozen juice	3	"	"	902 — instant potatoes		"	"
805 — frozen peas		"	0.272	903 — Chinese dinners		"	"
806 — frozen green beans		"	"	904 — salads, coleslaw		"	"
				905 — snack foods		"	"
				907 — other		"	"

References

Agriculture Canada. *Weights and Conversion Factors for Canadian Agricultural Products*, Publication No. 1155, September 1962.

Health and Welfare Canada. *Nutrient Values of Some Common Foods* (Ottawa, 1974).

U.S. Department of Agriculture. *Composition of Foods . . . Raw Processed, Prepared, Agriculture Handbook No. 8*, revised. (Washington, D.C. 1963.)

APPENDIX N

CANADA'S FOOD GUIDE AND SOURCES OF NUTRIENTS

Table N.1 and N.2

TABLE N.1. CANADA'S FOOD GUIDE^a*Milk and Milk Products*

Children up to eleven years	2–3 servings per day
Adolescents	3–4 servings per day
Pregnant and Nursing Women	3–4 servings per day
Adults	2 servings per day

Skim, two percent, whole, buttermilk, reconstituted dry or evaporated milk may be used as a beverage or as the main ingredient in other foods. Cheese may also be chosen, such that:

1 serving = 250 ml (1 cup) milk, yoghurt or cottage cheese OR
 = 45 g (1½ ounces) Cheddar or process cheese

In addition, a supplement of vitamin D is recommended when milk is consumed which does not contain added vitamin D.

Meat and Alternates

Recommend 2 servings per day, where

1 serving = 60–90 g (2–3 ounces) cooked lean meat, poultry, liver or fish, OR
 = 60 mL (4 tablespoons) peanut butter, OR
 = 250 mL (1 cup) cooked dried peas, beans or lentils, OR
 = 80–250 mL (⅓ – 1 cup) nuts or seeds, OR
 = 60 g (2 ounces) Cheddar, process or cottage cheese, OR
 = 2 eggs

Bread and Cereals

Recommend 3–5 servings per day (whole grain or enriched). Whole grain products are recommended, where

1 serving = 1 slice bread, OR
 = 125–250 mL (½ – 1 cup) cooked or ready-to-eat cereal, OR
 = 1 roll or muffin, OR
 = 125–200 mL (½ – ¾ cup) cooked rice, macaroni or spaghetti.

Fruits and Vegetables

Recommend 4–5 servings per day, including at least two servings of vegetables. Choose a variety of both vegetables and fruits — cooked, raw or their juices. Include yellow or green or green leafy vegetables, such that:

1 serving = 125 mL (½ cup) vegetables or fruits, OR
 = 125 mL (½ cup) juice, OR
 = 1 medium potato, carrot, tomato, peach, apple, orange or banana.

^a Energy needs vary with age, sex and activity. Foods selected according to the guide can supply 1000–1400 calories. For additional energy, increase the number and size of servings from the various food groups or add other foods.

Source: Health and Welfare Canada. *Canada's Food Guide*. Ottawa: Supply and Services, 1977.

TABLE N.2. SOURCES OF FOOD ENERGY AND NUTRIENTS

Nutrients	Sources
Food Energy	Sugar, lard, butter, margarine, whole milk, ice cream, bakery products, potatoes, meat, breakfast cereals
Protein	Meat, poultry, fish, liver, legumes, whole milk, cheese, eggs, bread, potatoes, breakfast cereals
Fat	Lard, margarine, vegetable oils, nuts, peanut butter, milk, cream, cheese, eggs, fatty meats, fish and poultry, whole-grain cereals, processed foods made with fats and oils
Carbohydrates	Sugars and syrups, cereal grains, legumes, dried fruit, pasta products, bread, potatoes, bananas
Iron	Eggs, lean meats, legumes, whole grains, green leafy vegetables
Calcium	Milk, cheese, dark green vegetables, dried legumes
Phosphorus	Milk, cheese, meat, poultry, grains
Vitamin A	Provitamin A (beta-carotene) widely distributed in green vegetables. Retinol present in milk, butter, cheese, fortified margarine
Vitamin B-1 (Thiamine)	Pork, organ meats, whole grains, legumes
Vitamin B-2 (Riboflavin)	Widely distributed in foods
Niacin	Liver, lean meats, grains, legumes (can be formed from tryptophan).
Folacin	(Folate, Folic Acid)
Ascorbic Acid (Vitamin C)	Citrus fruits, tomatoes, green peppers, salad greens

Sources: Nevin S. Scrimshaw and Veron R. Young, "The Requirements of Human Nutrition," *Scientific American* (September 1976) and E.D. Wilson, K.H. Fisher, and M.E. Fuqua, *Principles of Nutrition*, 3rd edition (New York: Wiley, 1975).

TABLE 1. Characteristics of the 100 patients with schizophrenia

Characteristic	Number
Sex	
Male	68
Female	32
Age at admission	
15-24	18
25-34	22
35-44	20
45-54	15
55-64	10
65-74	8
75-84	5
85-94	2
95-104	1
Education	
Less than high school	15
High school	35
Some college	20
College graduate	10
Postgraduate	5
Occupation	
Unemployed	45
Employed	55
Marital status	
Single	35
Married	45
Divorced	10
Widowed	10

NOTE: Data are based on the 100 patients.

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